

# SINGAPORE MEDICAL ASSOCIATION NEWSLETTER

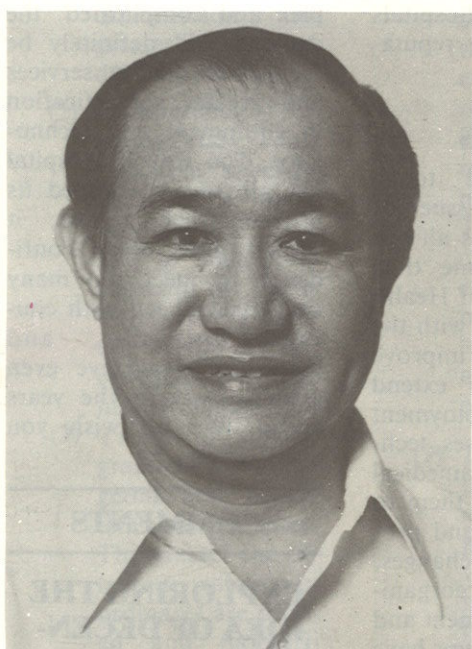
FOR PRIVATE CIRCULATION ONLY

Vol. 15 No. 5

JUNE 1984

MC(P) — 6/2/84

KDN 0284/84



MR HOWE .... Proposal still in conceptual stage.

## TOWARDS DECENTRALIZATION

The Ministry of Health has under consideration a plan to permit each hospital to have greater autonomy and independence to manage its own affairs. This was mentioned by Mr Howe Yoon Chong, Minister for Health at his address at Toa Payoh Hospital Silver Jubilee Dinner in May this year. He added that this proposal is still in the conceptual stage and that much more detailed work will have to be done before it can obtain government approval. This idea was highlighted in our local press reports.

We reproduce below the full text of his address at this function:

"We all know that unless we learn from the lessons of history, we will be condemned to repeat its mistakes. Toa Payoh Hospital is a case in point. Though 25 years is not a long time yet we can learn much from its short history. Clearly the first lesson is that for an acute general hospital to work well it must be properly and comprehensively planned. Over the years the constant need to make alterations and additions to meet urgent demands for more services at Toa Payoh Hospital must have been extremely disturbing to patients and staff not to mention the extra costs, the irritations, and the frustrations involved.

The second lesson is that it cannot be taken for granted that a particular locality and its surrounding neighbourhood will remain unchanged over one or two decades. Hence since it takes many years before a development project is completed, every hospital must think years ahead and be prepared to anticipate new demands and pressures

along the way.

Thirdly there must be flexibility not only in the layout of the buildings but also in the administration and management of a hospital with perhaps provisions for expansion to accommodate changes, technological advances, and developments that cannot be foreseen.

Like most development projects at that time, the construction of the original hospital was dictated by pressures from elsewhere. No attempt was made to project future needs or to investigate possible demands. Those in authority could only respond one step at a time. So when the General Hospital was overloaded with too many chronic sick and convalescent cases that could not be discharged, the answer was to move them to a home for the chronic sick in the sparsely populated rural area of Thomson Road. This would then release much needed beds in the General Hospital for more urgent needs.

### PAST HISTORY

Thomson Road Hospital for the chronic sick was completed in April 1959. It

was officially declared open in May 1959. It never functioned as such. In June 1959 there was a change of Government. An acute general hospital was considered to be more necessary. Much more work had to be done to effect the conversion. Today the Hospital is still going through the process of trying to provide the services demanded. Even after years of alterations and additions it is still far from ideal or even adequate to meet pressing needs.

New problems, new demands, and new pressures kept arising as old ones were overcome. Innumerable difficulties taxed the patience if not the ingenuity of successive groups of doctors, nurses, administrative and other staff. Slowly but surely the staff of the hospital through sheer determination, and hard work managed to effect the conversion to transform the original Thomson Road Hospital for the chronic sick into an acute general hospital with the necessary range of basic facilities and services. By 1965 its name was changed; and tonight we celebrate the 25th Anniversary of Toa Payoh Hospital. In doing

so, let us not forget the efforts, industry and diligence of so many dedicated people. Let us express our gratitude and acknowledge their invaluable contributions.

### PRESENT PROBLEMS

Without its being so planned, Toa Payoh Hospital found itself having to serve a reservoir of more than half a million population. The problems and difficulties that keep confronting the Toa Payoh Hospital are by no means over. Even with maximum effort it could only expand to just over 400 beds. With more people moving into the surrounding housing estates of Toa Payoh, Ang Mo Kio, Thomson, Sembawang, Yishun, and other neighbouring areas it is unlikely that the present hospital can meet the health care needs of so many people. That it has done so well up to now is already an achievement!

Toa Payoh Hospital must increase its number of wards and beds. But how? There are financial and physical constraints to expansion. The layout and design of its buildings preclude major expansion. The

terrain can cause engineering difficulties. Piecemeal improvements have been and are still being carried out. They will not get to the root of the problems. A comprehensive redevelopment plan very much on the lines of the SGH is the answer. But that will take 10 years or more. The pressures are immediate and fast increasing. They can render piecemeal expansion plans inadequate: doing too little too late. The Medical Director and senior officers of Toa Payoh Hospital will have to work out these difficult problems. I am sure the Ministry of Health will provide them with every assistance and encouragement.

Cont'd on page 2

### INSIDE

Feedback Loops	4
Noise Induced Hearing Loss	5
Letters to Editor	6
Relations between the GP and the Specialist	8
Book Reviews	11



## EDITORIAL

### FREE COMPETITION

Privatisation and Free Competition are being tried out as solutions to rising health care costs. Whether health services are bought privately or under a compulsory insurance or government programme, resources are being used which could have met other needs (the so-called opportunity cost of health services purchased). Thus individually or collectively people want value for money in terms of quality, services for what they spend on health services. Is this most likely to be secured by encouraging free competition between doctors both in their role as providers and in their role as purchasing agent?

The case for the provision of any goods or services by private individual contractors and firms is that competition results in goods and services at a price and of a quality for which consumers are prepared to pay. Producers who provide what consumers judge to be value for money prosper and those who are less successful in achieving this do less well or fail. This economic system operates if customers can assess quality.

Three important points set the medical market apart. First, the dominating feature of the health market is the consumers' lack of knowledge. They do not know their risks of ill-health. They do not normally know what precise services they want to buy, the prospects of benefiting from them or are able to assess whether they have had good or bad health after they have bought them. Few are equipped to express a preference beyond the choice of a doctor or dentist.

Secondly, as consumers often want health services urgently, this limits the extent to which they can shop around to find the best buy.

Third, the main demand for the use of health resources comes mainly from the key provider — the doctor — rather than from consumers.

The patient is not in a position to know how much of the doctor's time he needs — what examinations should be undertaken, what questions should be asked and answered or what features of his medical history may be relevant. Nor does he know what preventive and curative actions can improve his health. Indeed, he is usually going to the doctor to discover what is wrong with him and how it can be cured or prevented. He is trusting the doctor to perform two roles on his behalf. The first is the diagnosis of what is required and the second is the provision of the necessary services by himself or others.

In view of the patient's ignorance the doctor is expected to operate as a knowledgeable purchaser in the patient's interest. The patient expects him to provide or order only those services which are needed. If the patient is paying, he expects his doctor to secure value for money when he decides what should be purchased.

In deciding what to provide or order for his patients, the doctor is expected under his ethical code to ignore considerations of his own financial gain. But the doctor in private practice, charging on the traditional fee-for-service basis, is constantly faced with conflicts of interest. He has to ensure his continued survival in the market. Where the market is over-supplied, either intentionally or unintentionally, the need to ensure survival may force the doctor to override the ethical expectation of him not to be a profit maximiser.

One other key problem of a private medical market is fragmentation. There are doctors, dentists, hospitals, pharmacists and diagnostic services all operated separately

*Cont'd on page 6*

## TOWARDS DECENTRALIZATION

*Cont'd from page 1*

### FUTURE CHALLENGES

The Ministry would like to see Toa Payoh Hospital develop comprehensively not just into another acute general hospital, but one with its own reputation and character. Clearly the existing range of health care and specialist services should be improved and expanded. They should be augmented by carefully selected specializations or sub-specializations in fields where the hospital has favourable conditions to attain excellence. Only when Toa Payoh Hospital can establish for itself a reputation for efficiency and excellence in these particular specialist fields will it attract the best doctors and experts to work and teach in it.

The selection of the right specializations is thus crucial to Toa Payoh Hospital's long-term expansion and redevelopment. This is not going to be easy. There are already many hospitals with a clear head start. To claim advantage through installing new equipment may not work either. Modern sophisticated equipment and installations are extremely costly. Technological advances and commercial promotion dictate that they be regularly replaced by newer and better models. Few hospitals can afford frequent replacements, much less the under-utilization of such installations and equipment.

One way is to excel in the quality of health care services, training facilities, intensive care and nursing attention, or in research, in efficient technical, paramedical, and other supporting services. Higher standards of efficiency and discipline, congenial working environment, plus loyal and dedicated staff of all categories can enable Toa Payoh Hospital to establish its distinctive character and reputation. Positive leadership, enlightened staff relations, and concern for all those who work for the hospital can encourage greater commitment and productivity. When doctors, nurses, and

other staff who have worked, trained or gained experience at Toa Payoh Hospital become so skilled that they are highly sought after for service in other wellknown hospitals, Toa Payoh Hospital will have arrived. Many of the world's renowned hospitals have built up their reputation this way.

### WIDER ISSUES

Now let me touch briefly on one issue of interest that affects all our hospitals. For some time now the Ministry of Health has been wrestling with the problem of how to improve our hospitals, to extend better terms of employment to our doctors, nurses, technical and other paramedical staff to encourage them to be more efficient and productive. Many changes, adjustments, and reorganisations of management and administrative systems have been attempted, but without much apparent success.

The Ministry has under consideration a plan to permit each hospital to have greater autonomy and independence to manage its own affairs. Each hospital being self-governing will be managed and run as a separate entity with minimum policy guidance from the Ministry. All revenues and expenditure will however have to be properly accounted for and audited. Each hospital will have its own Board of Governors, Management and Supervisory Boards. An annual block vote will be provided to cover authorized expenses and approved deficits. This drastic change calls for a new generation of Medical Directors, Hospital Administrators, and Managers. Hospitals can then compete with each other. The more successful ones will be in a better position to acquire new equipment, to attract better staff, and to pay better salaries, specialist allowances, and bonuses.

This proposal is still in the conceptual stage. Much more detailed work will have to be done before it can obtain Government approval for implementa-

tion. Toa Payoh Hospital can probably fit very well into this new plan. With good leadership, hard work, and diligence it has dealt successfully with difficult and changing situations. In the years ahead the problems will be more complex and complicated. The demand will definitely be for better quality services and greater sophistication in equipment and technology. Toa Payoh Hospital has already established its proven track record, it should have every confidence to meet the many challenges ahead with courage, initiative, and ingenuity to achieve even greater glory in the years ahead. We all wish you every success."

### COMMENTS

#### EXPLORING THE IDEA OF DECENTRALIZATION

1. **Decentralization Pros**  
There is no doubt that decentralization and a corresponding delegation of managerial responsibility and authority encourage participation through group effort. Managerial decentralization tends to improve organizational morale among subordinate groups.

There are other reasons for decentralization. It keeps an organization flexible. Emergency situations can be handled with dispatch. It maintains the vitality of the organization by making possible a greater and more effective exercise of initiative by subordinates. The quality of operative decisions can be improved, because they are made by executives who are closer to the point of operative performance and are thoroughly familiar with the requirements of local situations.

2. **Factors in Decentralization**  
Much has been written

*Cont'd on page 3*



## TOWARDS DECENTRALIZATION

Cont'd from page 2

about decentralization. A number of factors affect the extent to which decentralization of responsibility and authority may take place:

- (1) The size of the organization and the complexity of its activities. The larger the size of an organization, the greater the need for decentralization.
- (2) Competency of managerial and operative subordinates. The more subordinates are able to make wise decisions for themselves, the greater the degree of decentralization that may take place.
- (3) Training programmes for managerial and operative subordinates. The greater the extent to which subordinates are trained and indoctrinated, the greater the extent of decentralization that can be made safely. Delegation of responsibility and authority by a superior executive does not relieve him of accountability for the accomplishment of his assigned mission.
- (4) The quality of organizational planning. A well-structured organization permits greater decentralization.
- (5) The quality of leadership at all levels. Good leadership throughout permits greater decentralization.
- (6) The degree of personnel turnover. The greater the stability of manpower, the greater the extent to which decentralization may take place.
- (7) The critical nature of decisions. The more a decision tends to be critical to the success of an organization, the more the authority must be centralized. Even in other-

wise decentralized organisations, large expenditures of money, for example, are usually centralized.

- (8) The extent to which activities must be coordinated. The broader the area of responsibility to be covered by a decision, the greater the need for the centralization of responsibility and authority for administrative management. Thus, problems concerning an entire division must be made at that level and coordinated with the other divisions.
  - (9) The management philosophy of the organization. The greater the faith which management has in the ability of the individual, the greater will be the extent of decentralization. One cannot delegate responsibility and authority to a subordinate unless there is assurance that the subordinate can and will make decisions of the same general kind and quality that management would make.
  - (10) The use of staff. The greater the effective use of specialized staff assistance at all levels, the greater the ability to decentralize.
- 3. Centralized Policy and Decentralized Administration**
- Perhaps one of the greatest organizational thinkers in our time on centralization and decentralization has been Alfred P Sloan in the context of the General Motors Experience.

General Motors has been a leader in both general and federal decentralization. Federal decentralization is the grouping of activities into nearly auto-

mous product businesses which operates as a single private business would operate. Each has its own profit and loss responsibility, its own market, its own product.

In 1921, Alfred P Sloan, Jr., became the guiding spirit behind General Motors. Mr Sloan realized that many of the problems of his company were administrative and organizational. He sought to deal with them by developing a complete managerial philosophy for the company.

Harlow H Curtie, a former president of General Motors, reported Mr Sloan's analysis of the problem in this way:

"He realized that centralization, properly established, makes possible directional control, coordination, specialization, and resulting economies. He also realized that decentralization, properly established, develops initiative and responsibility; it makes possible the proper distribution of decisions at all levels of management, including the foreman - with

resulting flexibility and cooperative effort, so necessary to a large-scale enterprise. His objective was to obtain the proper balance between these two apparently conflicting principles of centralization and decentralization in order to obtain the best elements of each in the combination. He concluded that, to achieve this balance so necessary for flexibility of operation, General Motors management should be established on a foundation of cen-

Cont'd on page 12

## From the Pfizer Discovery Program

**new Trosyd**  
(tioconazole)

In vaginal infections ...

**new Gyno-Trosyd**

**so rapidly fungicidal it works with a single application**

- Single dose ointment efficacy in vaginal candidiasis
- Enhanced compliance
- Prefilled Applicator for convenience
- Ideal in clinic application to patients by doctors
- Demonstrated safety — negligible systemic absorption
- Alternative 3-day therapy using vaginal tablets.

In Dermal Infections ...

**new Trosyd**  
(tioconazole)

**so rapidly fungicidal it provides prompt relief and persistent cures**

- Rapidly fungicidal against clinically important fungi
- Rapid mycological resolution assures high cure rates
- Prolonged maintenance of cure
- Well tolerated with no reports of systemic reactions
- Convenient once daily application
- Enhanced compliance

Further details available on request

**Pfizer**

• 3, Jalan 241, Section 51A, Petaling Jaya, Malaysia  
• 11-17, PSA Multi-Storey Complex, Pasir Panjang Rd. Singapore 0511.

\* Trademark



# FEEDBACK LOOPS

Dr Chee Yam Cheng

The human body is beautifully programmed on an array of feedback loops. The only aim of such loops is the proper functioning of each part in harmony with other members of the body to the end that the body functions well as a whole. If one member suffers an insult, other members of the body need to adjust and adapt and they do so through these feedback loops.

The Japanese concept of management and in particular the management of people stresses that top management should treat each and every member of that corporation or factory as one of a large family. Each employee, each member is not soulless digit but a brother or sister, an uncle or auntie, a grandfather or grandmother and so on. Furthermore, as Mr Akio Morita stated so clearly in his "Productivity Lecture", should an employee seek to leave the company it reflects on top management for having failed to keep him in the family. Mr Morita stressed it was the company that employed him in the first place. No doubt he applied to join the company and top manage-

ment agreed to take him in. The responsibility for keeping him in, satisfied and happy, belongs to the company. If the company then found him unsuitable for the original job, it will retrain and redesignate him to a different work. It does not sack him. He drew the parallel to the family again. If there was a mongol, would the family turn him out? If there was misdeemeanour, would the offender be chastised and counselled?

None of us is perfect. The nature of our medical environment is often times not determined by ourselves. We may be posted to departments which of our own accord would never have thought of setting foot upon. Yet we go after great protests. But we go. The experience there may prove our original assessment totally wrong or our fears may be confirmed. Still we had not much of a choice and we stomached it, for four months or for six. However such an experience should cause us to want to prevent our colleagues from going through such a nightmare. So we speak up, we criticise. This is feedback. If the experi-

ence were a wonderful dream, feedback to this effect will still be appreciated not so much because praise of men is worth much but because things could be improved.

There are many levels of feedback which the union uses to monitor working conditions. I am equally sure the MOH has its own methods too but the SGMDPOA is advantaged in the fact that it represents the grass roots. Junior hospital staff who are not VIPs seldom are able to get a word into the top management personnel. It is not that they have nothing to say, rather it is that no one up there is willing or has the time to listen to them. But the union will. Many a time when a problem crops up and a junior doctor is only too willing to go up there and "spill the beans", obstacles are placed in his way. You often cannot even get an appointment and letters do not often receive a satisfactory reply other than acknowledging receipt of your woes which will be looked into. To us in the union, "looking into" is enough. The end result we want to see is a change, a change for the better. Files

of correspondence with no headway and are better burnt than stored. But if one phone call could get things done that is what we appreciate.

Statistics can never tell the whole story. A department with falling numbers of admissions, deaths, operations or outpatient attendances is not necessarily the worst department compared to one whose similar indices are rising. To interpret any statistics it is best to speak to those who are on the spot. They know better what is happening. It is no surprise to learn that some of the more senior staff may be unaware of certain trends as they continue to blissfully sail on cloud number nine. With posting courses the way they are, no one can predict who will land in one department at each changeover. When they leave, the impressions they gained, the heartaches they felt, the pressures they faced from relatives, the time their own conscience were pricked, all these and more are not easily forgotten. And if they have any civic consciousness they realise something needs to be done. Not so much somethings needs to be said although that is a prerequisite but rather changes must be effected. And such doctors are only too willing to discuss such matters with the correct people.

In every department there is a hierarchy of staff. While granting respect to those senior to ourselves is to be expected, no one should be blind enough and dumb enough to see nothing and say nothing if the circumstances demand that for conscience's sake, if nothing else, the patients be protected. Personal insults, inconveniences doctors can take but to my mind there is no reason even for that. So if patients' feedback tell us that something is amiss, that is serious indeed. The transferring of patients from one department to another facilitates comparisons by the patient and his relatives, and doctors, of the type of care they receive. Also it helps impress upon junior

staff and nurses and amahs differences (good and bad) between two departments of the same specialty. There is nothing to hide and there is nothing that can be hidden. The only trouble is in the past, people did not want to see; they did not want to observe.

Government units were service departments first and foremost and if their patient population dwindles there must be reasons. Admissions through A & E are uncontrolled by the recipient units so these should be roughly equal for two or three same specialty departments in the same hospital. What is selective is patient referral to a specific unit or a doctor by name. The roster of call days for units is well known. If referring doctors take all the trouble to find out if a certain unit is on call that day and then deliberately withhold referral, then that recipient unit unknowingly gets less referrals because it is being shunned. Speak to doctors in the recipient department and discover for yourselves how such a practice evolved and why it is being propagated. I need not elaborate. It has gone one step further, such referrals now occur more regularly to particular doctors rather than to units on call, irrespective of whether the doctor referred to is on duty or his unit is on call. This way, they say, unpleasantness, needless morbidity and mortality are avoided. To go even further, the blissfully ignorant recipient unit with sparse referrals to it, refers its patients to doctors of another discipline for valid reasons. The doctor so referred to comes to see the patient and may realise that no senior staff has seen the patient and the referral was effected because over the telephone the junior staff on asking for advice was instructed to do just that. And to top it all if no VIPs even get admitted to your department but keep going to your neighbour although you believe you could jolly well handle the problem, should you not question why? Is not a self-examination needed? Or would you

**Duinum** clomiphene citrate tablets 50 mg

could give the answer to



**male infertility due to oligospermia**  
**female infertility due to functional amenorrhoea**

Prescribed in 95 countries around the world  
Now available in Singapore

**MIL** Medochemie Ltd. Limassol-Cyprus

Sole Distributor:  
**DEREK MARKETING PRIVATE LTD.**  
20 Bideford Road  
#04-02 Wellington Building  
Singapore 0922. Tel: 7371122

Cont'd on page 12



# NOISE INDUCED HEARING LOSS

Dr K A Abraham

Intense noise exposure has been known to cause hearing loss from almost as long as recorded history. It is mentioned in the writings of early Romans and in the Bible. We are familiar with terms like "Boilermaker's Deafness" and "Blacksmith's Deafness" and Quasimodo was said to be deafened by the noise of the Bells of Notre Dame.

Noise induced hearing loss (N.I.H.L.) today is a well recognised condition and has been a compensable Industrial Disease in Singapore since 1975. No doubt, the Industrial Revolution has seen an increase in the problem in many countries. In 1977 N.I.H.L. was the leading notifiable Industrial Disease in Singapore, according to our Industrial Health Department statistics but we have, fortunately, seen a gradual decrease in the incidence in the last few years.

In Singapore N.I.H.L. is usually detected through the routine surveillance of the Industrial Health Department, of the Ministry of Labour and from the referrals from doctors in the Ministry of Defence. An occasional case is picked up from referrals from the Outpatient Clinics. The otolaryngologist, among others, has an important role to play in the confirmation of the condition.

## The Auditory Effects of Noise

Noise interferes with the perception of other sounds, especially speech, for which we most use our hearing for. In real life, people raise their voices (sometimes without knowing it) in order to be heard in a noisy environment.

More important is the after effects of exposure to intense noise. Over a period of time the victim suffers a hearing loss. Curiously, certain frequencies are initially affected. In a typical case, if an unprotected person is exposed daily to intense noise levels over a few years, one will notice an increase in the hearing thresholds of hearing in the 3000 and 4000 Hz. frequencies and this will increase with

further exposure.

One of the early changes one will notice is what is referred to as a Temporary Threshold Shift (T.T.S.). Following exposure to loud noise over a period of time, if an audiometric assessment is carried out, there will be an increase in the thresholds at the 3000, and 4000 Hz. frequency range, of about 30 to 40 dB usually. After a period of rest this "dip" disappears and a fairly normal audiogram is again noted. With further exposure the "dip" returns but this time takes possibly longer to return to normal. With further noise exposure the hearing loss becomes a Permanent Threshold Shift (P.T.S.). T.T.S. is important from two points of view. First, it has to be distinguished from P.T.S. for medico-legal purpose and secondly it is an early "warning" sign of impending permanent damage.

Speech distortion is almost always present to a certain degree in noise induced hearing loss.

The phenomenon of recruitment which is classically seen in cochlear lesions is also seen in N.I.H.L. Here, perceived loudness increases more rapidly, once threshold level is reached.

Tinnitus is the other symptom which is almost always present and which is almost always the patients first and often, only complaint.

## Pathology

The hair cells, especially the outer, bear the brunt of the damage. There is cellular swelling, disintegration of membrane nuclei and the loss of cilia. At a late stage there is a complete absence of the cells and the hair cell population decreases. Also, if the noise is of a particular frequency, the damage appears to be maximum in the corresponding cochlear section subserving hearing of that frequency or a octave higher.

The "4kHz Notch" is considered a typical audiometric finding in N.I.H.L. The cause of this is not fully

understood. Many theories have been suggested. One of the more popular is that the resonance of characteristics of the ear canal produce it. Others suggest that the speed of the travelling sound wave and the amplitude of the cochlear duct is felt mainly in the "4kHz region".

## Clinical Evaluation of N.I.H.L.

The task of the E.N.T. surgeon is to decide if the hearing loss is due to noise exposure. If he thinks so, then he should be in a position to give an expert opinion on the disability. This is often not an easy task.

The history is the most important part of the evaluation. A careful record of the patient's present and all past occupations is made. The periods for which he has been exposed and the kind of noise to which he is exposed is noted. Has he done National Service and if so what was his vocation? Has he used ear protectives?

A history of head injury, ear infections and use of ototoxic drugs is recorded.

The otologic examination is mainly to rule out ear diseases, for example, chronic ear infections and abnormalities of the eardrum.

The patient is then put through an audiometric assessment. This usually involves, firstly, pure tone audiometry for both air and bone conduction. Depending on the findings other tests are done. If there is a suspicion of feigning or exaggerated deafness, special objective audiometric tests are done. Details of audiometric testing are outside the scope of this discussion. Suffice it to say that the tests must be carried out by trained personnel and the audiometers must meet acceptable standards and must be constantly calibrated.

Other tests, especially X-rays, could be indicated in certain cases.

At this stage one is usually in a position to make a fairly accurate

diagnosis of N.I.H.L. It may be necessary to repeat tests, after a period of time, to rule out Temporary Threshold Shift or to confirm results.

## Management of the Problem

Ideally of course it is best to avoid exposure to loud noise. This Utopian dream is however unlikely to be achieved in the foreseeable future.

Prevention of the problem is more likely to meet with success at the present moment. Noise levels in industry has to be constantly checked. Certain guidelines are present. In most countries exposure of up to 90dB for eight hours a day is considered the limit. This is however no magic figure as many other factors are also important, like the kind of noise, and the distance from the source which are important considerations. Noise levels are measured by the use of a sound level meter. The time for which an individual is exposed, is also important.

Attempts at reduction of noise at the source, is money well spent. A detailed discussion of this, is outside the scope of this paper. It is possible to reduce noise caused by machines, by its proper use and maintenance. It is possible to relocate noisy equipment or to build rooms in such a way as to absorb sound or to build barriers or enclosures. Mufflers can be inserted into ducts or at intake or at exhaust sections to reduce noise.

Hearing Protectors: The person at risk can be further protected by the use of hearing protectors. These are usually earplugs or earmuffs or both. Earmuffs provide about 5dB more protection than earplugs. The aim of this is to economically reduce hazardous noise levels to safer ones and to prevent hearing loss. The problem is, that the employee either does not wear it, or wear it improperly. Educating the wearer is of course, of prime importance here.

Pre-employment audiograms are done and a constant check on the hearing status of the employees at risk, is mandatory.

Once the diagnosis of N.I.H.L. is made the patient is told about, so that further exposure can be avoided or reduced. The actual hearing loss is determined. Hearing loss is usually determined by averaging the audiometric for 500, 1000 and 2000 Hz. These frequencies are referred to as the speech frequencies, as these are thought to be most important for speech reception. As has been stated the initial loss in N.I.H.L. affects the 3000 and 4000 Hz. and therefore in the early stages the victim does not suffer significant hearing loss according to present day assessment of hearing disability. Herein could lie the first flaw of present day recommendations for assessment of hearing disability. There is quite a bit of evidence to show that frequencies of up to 5000 Hz could

Cont'd on page 8

## CONGRATULATIONS

MASTER OF MEDICINE EXAMINATION (Internal Medicine) June 1984.

CHNG Hiok Hee (Miss)

DING Zee Pin (Miss)

LEE Chang Long

Florence LIM Chua Lian (Miss)

LIM Poh Heng

NG Swee Cheng (Miss)

PHAY Ken Lin (Miss)



## EDITORIAL

Cont'd from page 2

on a profit or, as is often the case with hospitals on a non-profit basis. There is no single organisation pledged to provide the best health care service possible out of a limited budget.

Said Brian Abel-Smith, Professor of Social Administration, London School of Economics and Political Science, in his book entitled, *'Value for Money in Health Services (Reprinted 1983)'*, "Experience and theory have shown leaving the private market to respond to money-backed demand results in maldistribution of resources, risks for the quality of some services, the provision of excessive, unnecessary and ineffective services, an inflation of costs and a general distortion of health priorities in societies at all levels of development. Spending more on health services does not necessarily generate better health for the country as a whole."

Thus the supply of health services need to be planned. It is not enough to attempt to regulate the demands for resources made by doctors after they have been made. Planning needs to extend not only over hospitals and facilities for primary care but over medical and other manpower to staff the services and over all the related facilities for social care.

But the best-laid plans can fail to be fulfilled unless those working in the services want to make them work. Thus ultimately what matters is not just the financial incentives operating on those working in health services, but their ethos and their commitment to serve not only individual patients but the health of the community as a whole. This is not true only of doctors, dentists or of administrators and managers, but of nurses, social workers, and paramedical workers as well.

Value for money in health care will not be secured until health professionals see it as part of their responsibility to see that it is. This has major implications for the original education and continued education of those working in health services. It also has major implications for the selection of those who are educated and trained and for those who provide that education and training.

GLG

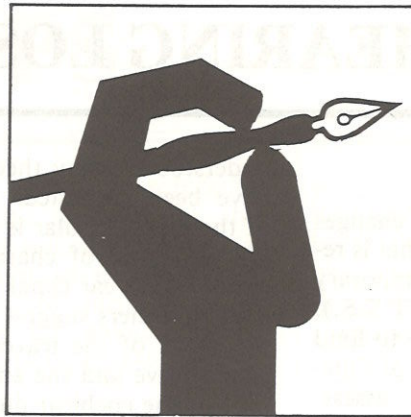
### SMA SECRETARIAT HOURS

Mon to Fri — 9.00 am to 6.00 pm  
Sat — 9.00 am to 2.00 pm

### EDITORIAL BOARD

Dr Goh Lee Gan	— Editor
Dr Clarence Tan	— Member
Dr Chee Yam Cheng	— Member
Dr Tan Hooi Hwa	— Member
Dr N K Yong	— Ex-Officio
Michael Loh	— Exec Secretary
Elin Chan	— Editorial Assistant

The views and opinions expressed in all the articles are those of the authors. These are not the views of the Editorial Board nor the SMA Council unless specifically stated so in writing. The contents of the Newsletters are not to be printed in whole or in part without prior written approval of the Editor.



## LETTERS TO THE EDITOR

### ON AIH & AID

**EDITORIAL NOTE** - Dr Vincent Ng Geok Khim has written to express his views on the SMA Council's recent statement on AID & AIH which was issued to SBC at their request; SMA Council's statement was published in the April issue of the SMA Newsletter.

We showed Dr Ng's letter to 3 of our gynaecologist colleagues for comments. Dr Teoh Eng Soon and Dr Lawrence Chan have since replied. Printed below are Dr Ng's letter and replies from both Dr Teoh and Dr Chan.

Dear Sir,

I refer to the SMA's Statement on AID and AIH published in Vol: 15 No: 3 of your Newsletter. It contained large numbers of errors and mistakes that is highly misleading. May I through the Newsletter, try to bring some perspective into this?

(a) AIH: If the husband has severe oligospermia or azoospermia, nothing is to be gained by artificially inseminating what could not be achieved the natural way. Various publications have been written on AIH and the consensus of opinion is that this method gives poor results. Dixon et al (1976) had 9.5% pregnancy out of 158 AIH patients. The authors concluded that their results are no different from the chance of conception following natural insemination.

I append a list of various other publications on the result of AIH in oligospermia. (Table 1).

Even the use of split ejaculate was disappointing. (Vaughan William (1976), Dixon et al (1976).)

In our clinical experiences

locally, AIH as a treatment for oligo or azoospermia has been extremely disappointing as any gynaecologist who has done this will testify. So much for advocating AIH!!

(b) AID: In my personal experience, AID donors are highly motivated to help a fellow human being. The question of attracting the wrong kind of donors do not arise at all as screening procedures are sufficiently exclusive.

To equate seminal fluid with organs is ludicrous.

Even in England, payment to donors is not frowned upon. Certainly the Royal College of Obstetricians & Gynaecologists do not proscribe this. Our medical practice is based on British Medical Practice. And virtually all Obstetrician/Gynaecologist are M.R.C.O.G.s. It is only practical and realistic to reimburse donors for the trouble and expenses taken to come forward. (D.N.Joyce, Proceedings, Royal College of Obstetricians & Gynaecologists).

Where this matter is mentioned, all published reports of AID practice appear to recommend payment of donors. The B.M.A. Panel on Human Artificial Insemination (1973) under the chairmanship of Sir John Peel suggested re-imbursement potential donors for their time. Payment is done even in a National Health Service set

up. At King's College Hospital, London, donors are paid £ 3/- per donation (1976 rates). In Bristol, the Southmead District Health Authority also paid donors the same rate. In Sydney, the going rate was A\$10/- per donation.

So where is the ethical consideration here??

There is a sperm bank in KKMH but alas there is a dearth of 'volunteer' donors. Perhaps the SMA Council can help out with voluntary donations. KKMH would be delighted.

Contrary to what SMA Council's statement, private sperm bank can have the resources to screen donors according to acceptable guidelines. The following screening procedures are recommended: (Proceedings R.C.O.G. 1976).

- (1) Initial interview with medical and family history.
- (2) General examination of physical characteristics.
- (3) Semen analysis and culture of each specimen for gonococci.
- (4) VDRL
- (5) Blood grouping only if Rhesus Negative donors are needed.
- (6) Other screening procedures only if dealing with donors or recipients with particular high risk factors indicating specific investigations.
- (7) I would add Australian Antigen for the local population.



Table 1 Success Rates of AIH in Oligospermia

Author	Patients	Pregnancies	Success (%)
Decker (1978)	155	27	17
Harrison (1978)	20	0	0
Russell (1960)	34	2	6
Thompson & Boyle (1980, Personal Communication)	28	2	7
Usherwood, Halim & Edwards (1976)	37	8	22
Whitelaw (1979)	82	10	12
	356	49	13

Routine Karyotyping donors is the sort of perfectionist that can be let go (J.H. Edwards, Proceedings Royal College of Obstetricians & Gynaecologists - 1976). Private sperm banks have been successfully organised. (B.A. Mason workshop on Frozen Human Semen, 1979).

With guidelines such as these, the SMA Council obviously does not know what screening procedures are and what they cost.

Going through that list is not going to break Fort Knox. So please let us state the facts and let the people judge for themselves.

In conclusion, may I suggest that in future, where SMA Council is in doubt, please go through the voluminous mountain of well-known publications available before issuing statements that do not stand up to critical analysis.

Yours sincerely,

Dr Vincent Ng Geok Khim,

### Dr Lawrence Chan's Comments

Dear Sir,

Thank you for asking me to comment on the reply by Dr Vincent Ng Geok Khim to the SMA's statement on A.I.H. and A.I.D. I cannot find real differences of fact expressed by the two parties.

On A.I.H., the SMA correctly stated that the method is simpler than A.I.D. on both ethical and legal questions. Dr Ng expressed that A.I.H. has a low success rate when utilised.

Regarding A.I.D., the SMA correctly said that A.I.D. is more complex as regards legal and ethical implications. In Singapore, the law is not explicit concerning the legal implications of A.I.D. and the status of the offspring. This is not disputed by Dr Ng. The contention seems to be concerning the feasibility and advisability of setting up a Private Sperm Bank. The SMA fears that this may attract the wrong kind of donors. Dr Ng has found donors to be well motivated from his own experience. As regards the reimbursement of donors with a fee, Dr Ng feels this is legitimate. The fact that sperm banks in the U.K. do pay their donors does not mean that we in Singapore should follow suit. The SMA is certainly entitled to their stand that for Singapore, the donation of organs and tissues must be without monetary reward. Semen, like blood can be classified as "tissues".

The SMA expressed its misgivings concerning whether a Private Sperm Bank set up in Singapore can ensure proper safeguards for screening, selection, resorting and testing of donors and semen. Dr Ng is of the opinion that this can be done, and that fulfilling the criteria for screening as set out in an R.C.O.G. report of 1976 is feasible. He would add the

test for Australia antigen. Would he also screen for Thalassemia? Dr Ng is entitled to his opinion. His statement that private sperm banks have been successfully set up in several countries is true.

The SMA also said that in Singapore, a Central Sperm Bank in a Teaching or Public Hospital is preferable to a Private Sperm Bank. This Central Sperm Bank should be made available to private doctors treating their own patients. Dr Ng did not express any objections to this.

Yours sincerely,

Dr Lawrence Chan

### Dr Teoh Eng Soon's Comments

Dear Sir,

As requested per your letter of 19 June 1984, I have written down my views on artificial insemination, taking into consideration the SMA Council's recent statement on the subject and Dr. Vincent Ng's letter to you. Both sides have raised some valid points and I

am unable to agree with either party in full. For instance, I fail to see the need for a central control of such a simple procedure as sperm banking since our ethical code already expects the best motives and standards from each one of us. A sperm bank need not always be used for AID. It may be used for AIH as well. On the other hand, I agree with the SMA Council that publicity and payment may attract the wrong kind of donors. Because of the emotive, sometimes covert, unnecessarily esoteric nature of artificial insemination, a discussion of the indications, nature, risks, precautions and expectations of artificial insemination may be of some interest to your readers.

Pregnancy by artificial insemination with the husband's sperm (AIH) was reported by John Hunter in 1770 and about 100 years later William Pancoast in Philadelphia performed the first AID (donor insemination).<sup>1</sup> Frozen human semen was first used in 1953.<sup>2</sup> They are now standard procedures in infertility practice, with well defined indications.

About 10% of marriages will encounter the problem of subfertility and four out of the ten are caused by male infertility.

Cont'd on page 9

#### REFERENCES

Decker, W.H. (1978) Pooled and frozen homologous (husband) semen for artificial insemination. *Infertility*, 1, 25-30

Dixon, R.E., Buttram, V.C. & Schum, C.W. (1976) Artificial insemination using homologous semen: a review of 158 cases. *Fertility and Sterility*, 27, 647-654.

Harrison, R.F. (1978) Insemination of husband's semen with and without the addition of caffeine. *Fertility and Sterility*, 29, 532-537.

Mason B.A. Workshop on Frozen Human Semen, 1979.

Report of Panel on Human Artificial Insemination (1973) B.M.A. British Med. J. 2,3 Supplement P.3.

Russell, J.K. (1960) Artificial insemination (husband) in the management of childlessness. *Lancet*, ii, 1223-1225

Thompson & Boyle (1980, personal communication).

Usherwood, M.McD., Halim, A. & EVANS, P.R. (1976) Artificial insemination (A.I.H.) for sperm antibodies and oligospermia. *British Journal Urology*, 48, 499-503.

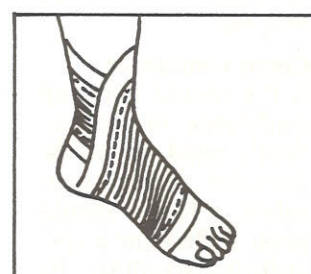
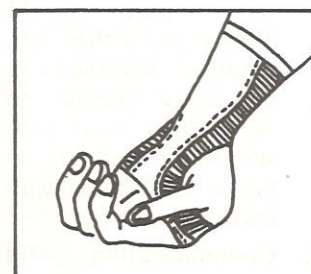
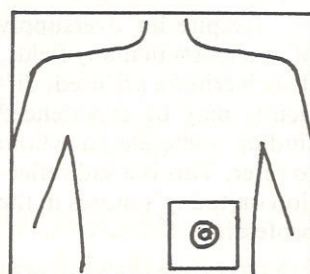
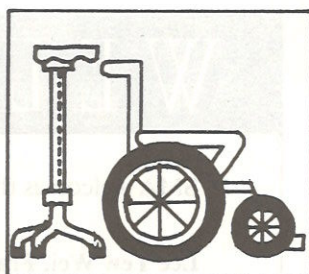
Vaughan William, K. (1976) *Acta Europea Fertili*, 6-420.

Whitelaw, W.J. (1979) The cervical cap self-applied in the treatment of severe oligospermia. *Fertility and Sterility*, 31, 86-87.

# Guardian Pharmacy

*So much more than a chemist*

## When Your Patients Need Support



## Guardian is the place

Centrepont Tel: 7374835, Mt Elizabeth Tel: 7344824, Jelita Tel: 4690700, Katong Tel: 4403945, Clifford Centre Tel: 914370, Cold Storage Katong Tel: 3452447, Goldhill Tel: 2509695.



## RELATIONS BETWEEN THE G.P. AND THE SPECIALIST

Once, not long ago, there was an unwritten code of behaviour between G.P.s and Specialists which worked well for the benefit of patients and doctors alike. The system was efficient and relatively irritation free. There have, however, been some serious changes.

G.P.s and Specialists have mutually dependent roles. An understanding of these roles is mandatory to successful medical practice. It is increasingly obvious that they are not understood by a considerable section of practitioners. Possibly a restatement will be valuable.

### The G.P.s role in relation to Specialists

#### 1. Limitations

Every G.P. should know his/her limitations and when to refer and should also respect patients' or relatives' wishes for a second opinion.

#### 2. To whom to refer?

G.P.s should be familiar with the competence, abilities and personalities of a whole range of specialists, so that they are able to recommend and advise patients who need referrals.

#### 3. Create confidence

G.P.s should build up confidence in the patient's mind about the specialist being consulted. They should never undermine a specialist's standing by word or inference.

#### 4. Communication

In the initial referral, G.P.s should write a letter stating:-

- The problems
- The background where relevant, and past history and patient's concerns (where known).
- What has gone before - investigations, treatment.
- What is required from specialist - opinion, full work-up, treatment, operation etc.
- The ongoing role the G.P. wishes to play after consultation.

In cases of urgency - the above should be communicated by phone and arrangements for early consultation, hospitalisation or operation can be made at this conversation.

Feedback by the G.P. to the Specialist should occur when treatment or advice has gone awry and in some cases when the patient dies. Positive feedback should also be given wherever possible.

#### 5. Guidance

G.P.s need to guide patients through the complicated medical maze. In this his/her competence may far exceed specialist colleagues. Protecting patients and at times, extracting them from the excesses practiced in certain quarters, is a new and expanding role for the G.P.

### The Specialist's role in relation to the G.P.

#### 1. Rapport

Specialists should be courteous, pleasant and considerate to patients and referring G.P.s

#### 2. Pay attention to G.P.s requests

Specialists should read carefully the G.P.s letter and should seldom go further with a patient than the G.P. has asked him/her to do without their consultation. Referral is not a carte blanche to take over a case.

#### 3. Communication with G.P.

Specialists should write or phone promptly after consultation and give an opinion where asked.

#### 4. Informing Patient

Patients should be told what is important for them to know and when to go back to their G.P.

#### 5. Inter-Referral

This should not occur without consulting the G.P. involved - except in emergencies.

#### 6. Availability

Availability to give opinions on emergencies or to consult urgently is vital to some special-

ties.

#### 7. Major decisions

Inform G.P. immediately if a major decision affecting patients is made - e.g. hospitalisation, operation etc.

#### 8. Major changes or death

Inform G.P. if there is sudden major worsening of a patient's condition, or if patient dies.

#### 9. Support not undermine

By word or deed do not attempt to usurp or undermine G.P.s role (in collaboration with his patient) as arbiter of patient's total medical care of the confidence of the patient in his/her G.P.

Much of what is listed seems obvious. Currently such a code is **not** the one adhered to by the profession as a whole.

Personally, when choosing a specialist, I seek certain qualities which are briefly listed and are not identical to the idealistic list above.

They are:-

1. Is he/she readily available and accessible.
2. Does he/she give a good opinion, clearly stated, in a brief and prompt letter (or by phone)?
3. Is he/she good at the job (clinically competent)?
4. Do patients (and myself) like him/her?
5. Does he/she do what I request, not inter-refer, not over-consult, not hang on to patients for ever?
6. Does he/she have good hospital access - private/public?
7. Does he/she charge fees which do not financially embarrass patients.

Despite an oversupply of specialists in many fields, if such criteria are used, difficulty may be experienced finding someone to whom to refer. This is a sad reflection on today's mores in the profession.

If we refer to the specialists in the major hospital field it is often difficult to find anyone in any special-

ity who has such standards.

Unfortunately (and here lies the reason for this editorial) the behaviour and standards of specialists in the teaching hospitals are picked up and indeed emulated as the norm by medical students. Hence, many bad points are perpetuated. The position is likely to worsen.

My views are those of an experienced G.P. - possibly they are contentious. I would welcome the other side of the coin - per-

haps specialists see things differently?

We are in times of great medical upheaval. Super-specialisation, super-technology, and major political changes are restructuring medicine. This is a good time to reappraise and restate roles. In particular, G.P.s and specialists who already show a sensitive consideration towards each other and towards their patients' wishes. It is not for them that this short editorial has been written.

*Reprinted from Western Australia Faculty Bulletin of the Royal Australian College of General Practitioners, May/June 1984.*

## NOISE INDUCED HEARING LOSS

*cont'd from page 5*

be important for speech reception.

In Singapore today for the purpose of workman's compensation, the diagnosis of N.I.H.L. is based on:

#### 1. Audiometry

Two audiograms taken at least three months apart showing a hearing loss with the following characteristics:

- a. bilateral sensorineural losses
- b. thresholds greater than 30dB at 4000 Hz and/or 6000Hz
- c. threshold averaged over 1, 2 and 3 kHz. is 50dB or more for air conduction in the better ear.

#### 2. Clinical Examination

Other causes of deafness are ruled out by history and clinical

examination.

#### 3. Occupational History

An adequate history of occupational exposure to high noise levels.

The Industrial Health Department has further guidelines for assessing hearing disability for compensation purposes.

Present knowledge on noise induced hearing loss is far from complete. The practices, recommendations and theories concerning the management of the problem are questionable. It is hoped that in the near future it will be possible for the otolaryngologist to give more reliable guidance regarding the proper management of occupational hearing loss.

I would like to thank the editorial board for inviting me to contribute this article. ■

## WELCOME

SMA welcomes the following new members:

Lee Yew Wei, Francis  
Reuben Mosko  
Tay Hua Hui

Thung Jee Liang  
Wee Chee Chau



## ON AIH & AID

Cont'd from page 7

ty. But AID is applicable to only one to three percent of such infertile couples.<sup>3,4</sup> It has been estimated that 20,000 births in the United States are the result of AID. In the United Kingdom, 2,500 new patients enter the AID programme each year.<sup>4</sup> If the extent of male fertility problems in Singapore is comparable, annually between 25 to 50 new Singapore couples would need AID if the wife is to conceive.

### AIH

AIH is indicated in subfertile couples practising normal, regular coitus if three consecutive, well-timed pre-coital tests are poor, regardless of the cause and in spite of a good seminal sample. In fact, the popular operation of ventral suspension should seldom be performed before a trial period of AIH when all other factors are normal. In the presence of cervical hostility, oligospermia and asthenospermia, high intrauterine insemination with samples cleansed of seminal plasma is helpful.<sup>5,6,7</sup> AIH will naturally not result in pregnancy if the husband is azoospermic, and it will rarely do so if he is severely oligospermic (sperm count below 1,000,000/ml).

In the small community that comprises Singapore's floating population of travelling executives and technicians, frozen sperms may conceivably be used for AIH if the husband is out of town during the ovulatory period.

There is no controversy over the usefulness of AIH but reports of its success rate range from an optimistic 78% to a hopeless 0%.<sup>4,5,8,9,10,11,12</sup> This is due to the variable criteria for the selection of cases, technique and the degree of commitment of all parties concerned. Dr. Vincent Ng scoffs at AIH and quote several papers in his support. However, the literature abounds with reports of success rates exceeding 20%.<sup>4,8-14</sup>

To take his point one step further, if he were to inform an oligospermic man that there was a possible, annual 9.5% pregnancy rate either from AIH or through normal coitus (his reference, not mine) I would very much doubt that this man would consider AID.

Most of us would consider it worthwhile to do AIH with poor quality semen for a success rate exceeding 10% because the natural pregnancy rate in such couples is less than 1% per cycle.<sup>5</sup>

At the Fertility Institute of the Michael Reese Hospital in Chicago, AIH was performed on 218 out of 1000 patients attending the clinic and preg-

nancy resulted from a single insemination in 36 patients, a most unlikely outcome with timed coitus.<sup>9</sup>

### AID

The legal and ethical issues surrounding AID should dissipate as societies become more enlightened, although this will not reduce the responsibility of the doctor. While statutes in seven American states uphold the legality of consensual AID<sup>15,16</sup>, one does not expect the nation of hereditary lords to declare the legitimacy of the process, the recommendations of doctors and progressive theologians, the BMA and the RCOG notwithstanding. However, the existence of sperm banks within the NHS setup in the UK<sup>4,17,18</sup> is evidence that AID has British government support. As far as I am aware, AID has been used in Singapore for the past 15 years. It remains an emotionally charged issue even within the

profession. It is usually practised with care and compassion, and attacked because of prejudice. I am not aware of any local practitioner resorting to it for personal gain. Commercial sperm banks are a different matter: some of these establishments treat seminal samples as items of trade and are not involved with the primary care of the infertile couple.

It is important that the scope of AID is not exaggerated. The 1971 Panel of the BMA which looked into artificial insemination noted that the simple nature of the procedure and widespread publicity may leave the door open to exploitation of the public. It expressed concern over the "very real danger of a too ready resort to AID before there has been full investigation of infertility according to the highest standards of current medical practice or before comprehensive treatment has been given the necessary time to prove its effectiveness." But the Panel was against any form of control over the practitioners.<sup>3</sup>

One expects that any

doctor practising AID will use it only as a last resort, either to bypass serious genetic disorder or the problem of a severely Rhesus-sensitised mother, or when he is certain that the probability of the husband ever being able to father a child is extremely remote.<sup>4,15,19,20</sup> By the time a couple reaches the stage of AID, they would usually have sought the opinion of several experts and gone over the matter between themselves in detail. Even an intelligent, azoospermic man may reject this solution. On the other hand, it is the husband who initiates the move in most cases. It needs considerable compassion on the husband's part to go with his wife to request AID. Because of this, the statistics collected by Jan Behrman in the USA showed that only one out of 800 marriages of AID couples have ended in divorce.<sup>21</sup>

It is a fallacy to think that AID will always achieve a pregnancy if the wife is normal. At the end of one year, only 60% of the women will conceive and it takes an average of seven treatment cycles before

conception occurs.<sup>4,15,16,19-29</sup>

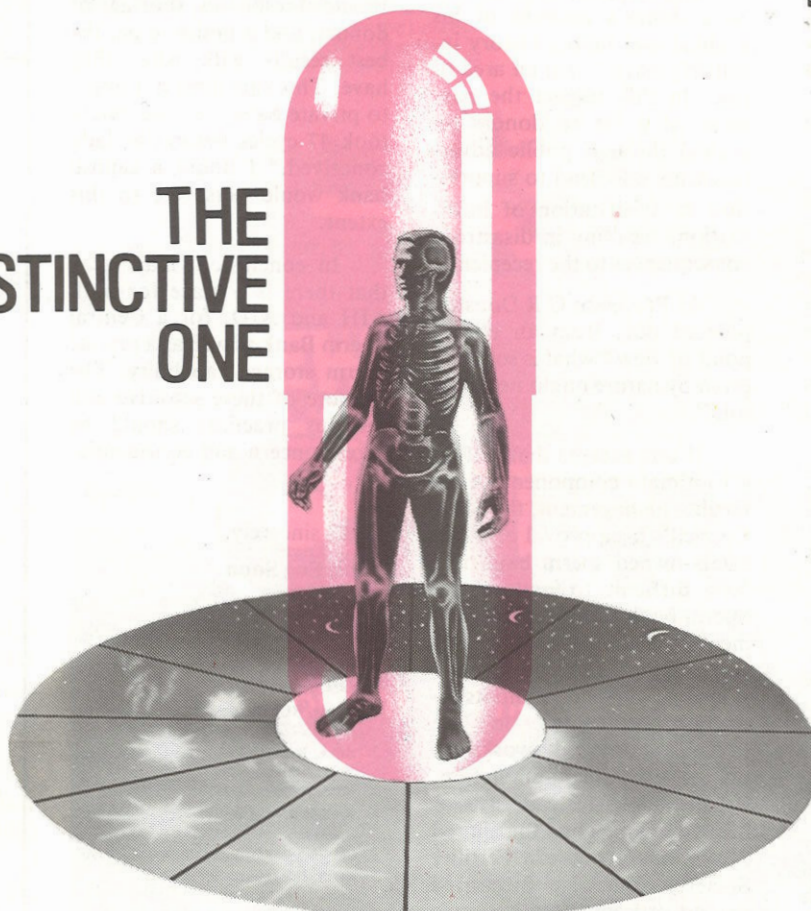
Most practitioners prefer using fresh to cryopreserved semen because of the higher pregnancy rates with the former. The largest AID clinic in London employs fresh semen for the standard treatment.<sup>4</sup> An elegant study by Richter and his co-workers which allowed the patient to serve as her own control by using fresh or frozen sperms from the same donor on alternate months demonstrated that the pregnancy rate was three times higher with fresh semen.<sup>30</sup> While good cryopreserved specimens using improved techniques now produces pregnancy rates identical to those of fresh semen, only 20-30% of seminal samples are actually suitable for cryopreservation.<sup>4,21</sup>

Still, in a serious AID programme, frozen sperms provide an essential back-up when the donor is unable to deliver on a specific day. The shortage of donors, the need to provide a 7 days a week service, the ability to use a single sample

Cont'd on page 10

## Pfizer INTRODUCING NEW Feldene 20<sub>mg</sub>

THE  
DISTINCTIVE  
ONE



Provides 24 hour relief of pain  
and inflammation with only  
one capsule . . . once-a-day

Further information  
available upon request

11-17 PSA Multi Storey C  
18 Pasir Panjang Road  
Singapore 0511



## LETTERS TO THE EDITOR

Cont'd from page 9

for repeated daily inseminations for women with irregular cycles are other reasons for using a frozen sperm bank.

The technique of cryopreservation is simple and well documented.<sup>4,21,31-34</sup> A cryoprotective medium containing sugar, citrate, glycine, antibiotic, egg yolk and most importantly glycerol is added to the seminal fluid so that the final concentration of glycerol is 7.5%. The semen sample is then drawn into fine, colour-coded, plastic straws of 0.25 ml. capacity, labelled, and cooled, stepwise, to a temperature of -196°C. It is stored in liquid nitrogen. When required, the straws are thawed, different centres preferring different rates of thawing. The procedure may be further simplified if one is satisfied with lower recovery rates for motile sperm, or if one needs to preserve the sperm for only a few days.<sup>35</sup>

The damaging effects of cryopreservation on the acrosomal membrane has been observed<sup>36</sup> but fortunately, when the sperms retain their potency, normal children have resulted. This was true even with the most primitive methods of cryopreservation. The incidence of birth defects, abortions and stillbirths are not different to that occurring in the normal population.<sup>31,37</sup> The claim that it is better is not statistically proven.<sup>38</sup> A study in Japan revealed that the IQ of such children was comparable to that of the general population.<sup>39</sup>

The risk of transmitting hereditary disorders and infectious disease are well recognised and cannot be totally eliminated.<sup>40-46</sup> Every effort must be taken to reduce these risks. There is some agreement on the minimum investigations but there is no agreement on the optimal investigations.<sup>4,40,41</sup> For example, the various STD are known to cause pelvic inflammatory disease and infertility (Chlamydia, mycoplasma) or increase the risk of cervical cancer (herpes, papilloma virus). Yet there is no report which mentions any screening procedure for such organisms despite prevalence rates as high as 20-50%.<sup>47</sup> It should also be noted that in the UK, one donor was responsible for two babies with neural tube defects<sup>4</sup>, and only last week I saw an imported case of PID following AID in a world-famous fertility clinic.

If a donor is used for only one or two successful recipients, the risk of consanguineous marriages among the offsprings would be negligible.<sup>4</sup> In Australia, samples are

transported interstate to further reduce the risk.<sup>16</sup> One resourceful Rabbi Feinstein avoided this problem by suggesting that non-Jewish donors be used for Jewish patients.<sup>48</sup>

The selection of donors requires care, attention to details and sound judgement. In teaching centres within the United States, they are only recruited within the medical profession. This ensures that the donor's background and character are known, a minimum intelligence is guaranteed and there is a rotation in supply. Many of the sperm banks in the United Kingdom and Australia use only medical or dental students and technical or professional staff within the hospital. It appears that in all these countries a fee as reimbursement for time was necessary to ensure a regular supply. A large sperm bank in Paris was more fortunate in that it found payment unnecessary. There is no reason why other healthy individuals of high IQ should not be used (such as other university students or husbands of successfully treated infertility patients) because studies have shown that medical students and doctors are not necessarily more reliable with their medical and family history.<sup>41</sup>

The need to rely blindly on a donor's account of his medical and family history inevitably leaves open an area of risk. In this respect the payment of a fee to donors recruited through public advertisements may lead to suppression or falsification of information, resulting in disastrous consequences to the recipient.

As Professor G R Dunstan pointed out, from an ethical point of view "what is so freely given by nature ought not to be sold".

If one accepts that AID is a legitimate component of infertility management, the SMA Council's disapproval of a privately-owned sperm bank is a little difficult to understand. Sperm banks are only a refinement of AID. One of the largest privately-run sperm bank is located in London and its director participated in the RCOG sponsored workshop on Artificial Insemination. Private banks have been established in Israel and the United States. The American Fertility Society's journal even carried an advertisement from one such bank.<sup>38</sup> As a rule such banks are difficult to maintain, and if the owner hopes to earn money thereby, I wish him luck! Rudi Ansbacher reported that the June 17, 1971 issue of the San Francisco Chronicle

publicised the city's first frozen sperm bank: on July 18, 1975 the same newspaper described its demise with an article entitled: "Bad Seed: How Sperm Bank Lost Its Deposits". One of the main reasons for failure was the poor pregnancy rate with frozen semen.<sup>49</sup>

I agree that the need for AID in Singapore is very small and it may eventually be uneconomical to run a private sperm bank. However, there is a tremendous back-log at present because the private gynaecologists, and I would add — the government gynaecologists, have been unable to provide an AID service. So if one also extends one's interest beyond Singapore, it is possible that a few sperm banks may be self-supporting. I am personally not concerned that "commercial consideration may override ethical and professional ones" because this applies to every aspect of our practice. However, there is a real risk that habituated donors, eager for the \$40 twice a week, or some super-studs, may be responsible for a disproportionately large number of offsprings and thereby raise the spectre of consanguinity.

The existence of a central sperm bank supplying the needs of all gynaecologists will certainly be convenient, but whether it will be economic is another matter. Drawing on the British experience, we know that some NHS Banks limit their patients' age to 30 and total treatment cycles to six or twelve because of limited financial resources, shortage of donors, and a desire to get the best results with what they have. This rule does not apply to private banks. In one case it took 47 cycles before the lady conceived.<sup>4</sup> I doubt a central bank would persevere to this extent.

In conclusion, may I say that there is a place for both AIH and AID, for a Central Sperm Bank as well as a private sperm storage capability. The keynote of these sensitive and perilous practices should be care, concern and confidentiality.

Yours sincerely,  
**Teoh Eng Soon**

### REFERENCES

1. Gregoire, AT, Mayer, RC: *Fert. Steril.*, 16: 130, 1965
2. Bunge, RG, Sherman, JK: *Nature*, 172: 767, 1953
3. BMA: Report of Panel on Human Artificial Insemination *BMJ*, 2, Suppl. 3, 1973
4. Brudenell, M et al.: *Artificial Insemination (Proceedings of the 4th Study Group of the RCOG, 1976)*
5. Kegin, JFP et al.: *Lancet*, 1: 533, 1984
6. Joyce, D, Vissilopoulos, D: *Clin. Obstet. Gynaec.*, 8: 587, 1981
7. Harris, SJ et al.: *Fert. Steril.*, 36: 219, 1981
8. Finefold, WJ: *Artificial Insemination with Husband's Sperm*. Springfield: Charles C Thomas, 1980
9. Barwin, BN: *J. Reprod. Fert.*, 36: 101, 1974
10. Cohen, MR, Pandeza, G: *Fertility & Sterility (Proceedings of the 7th World Congress in Tokyo)*. Amsterdam: Excerpta Medica, 1973
11. Diamond, MP et al.: *Fert. Steril.*, 39: 480, 1983
12. Pfeffer, WH: *Fert. Steril.*, 34: 356, 1980
13. Amelar, R and Hotchkiss, RS: *Fert. Steril.*, 16: 46, 1965
14. Nachtigall, RD et al.: *Fert. Steril.*, 32: 141, 1979
15. Beck, WJ: *In: Modern Trends in Infertility and Conception Control* Eds: EE Wallach, RD Kempers, Baltimore: William & Wilkins, 1979
16. Mathews, CD: *In: The Infertile Couple*. Eds: RJ Pepperell, B Hudson and C Wood. Edinburgh: Churchill Livingstone, 1980
17. Ledward, RS et al.: *Brit. J. Obstet. Gynaec.*, 83: 917, 1976
18. Bromwich, P et al.: *Brit. J. Obstet. Gynaec.*, 85: 641, 1978
19. Finegold, WJ: *Artificial Insemination*. Springfield: Charles C Thomas, 1964
20. Behrman, SJ: *In: Progress in Infertility*. Eds: SJ Behrman and RW Kistner. Boston: Little Brown & Co., 1968
21. Richardson, D, Joyce, D and Symonds, M: *Frozen Human Semen (Proceedings of RCOG Workshop, 1979)*
22. Behrman, SJ and Sawada, Y: *Fert. Steril.*, 17: 457, 1966
23. Chong, AP and Taymour, Fert. Steril.: 17: 457, 1966
24. Beck, WM: *Clin. Obstet. Gynec.*, 17: 115, 1974
25. Quinlivan, WLG: *Fert. Steril.*, 32: 157, 1979
26. Schwartz, D et al.: *Fert. Steril.*, 31: 226, 1979
27. Corson, SI: *Fert. Steril.*, 33: 415, 1980
28. Aina, J: *Fert. Steril.*, 37: 94, 1982
29. Albotch, BH et al.: *Fert. Steril.*, 37: 792, 1982
30. Richter, MA et al.: *Fert. Steril.*, 41: 277, 1984
31. Sherman, JK: *Fert. Steril.*, 24: 397, 1973
32. Freund, M and Wiederman, J: *J. Reprod. Fert.*, 11: 1, 1966
33. Ackerman, DR and Behrman, SJ: *Amer. J. Obstet. Gynec.*, 103: 654, 1968
34. Sherman, JK: *Fed. Proc.* 24: 288, 1965
35. Zavos, PM: *Fert. Steril.*, 34: 607, 1980
36. Mahadevan MM, Trousen, AO: *Fert. Steril.*, 41: 287, 1984
37. David, G et al.: *Brit. J. Obstet. Gynaec.*, 87: 1022, 1980
38. Advertisement *Fertility Steril.*, 30: December 1978
39. Iizuka R: *In: Fertility & Sterility* Eds: Hasegawa T and others. Amsterdam: Excerpta Med., 1973
40. Timmons, MC: *Fert. Steril.*, 35: 451, 1981
41. Simpson, JL: *Fert. Steril.*, 35: 395, 1981
42. Upadhyay, M et al.: *Fert. Steril.*, 41: 304, 1984
43. Toth, A, et al.: *Obstet. Gynec.*, 59: 556, 1982
44. Swenson, CE et al.: *Fert. Steril.*, 31: 660, 1979
45. Lewis, RW et al.: *Fert. Steril.*, 35: 194, 1981
46. Jennings, RT et al.: *Fert. Steril.*, 28: 554, 1977
47. Teoh ES and Tan RJS: *Proceedings 1st Intercongress of Obstet. Gynaec.*, Singapore, 1975
48. Schwartz, M et al.: *Fert. Steril.*, 33: 471, 1980
49. Ansbacher, R: *In: Modern Trends in Infertility and Conception Control* Eds: WW Wallach and RD Kempers, Baltimore: Williams & Wilkins, 1979

## Medical Meetings

Aug 2-5, 1984: Dynasty Hotel, Singapore  
**18th Singapore-Malaysia Congress of Medicine**  
Info: The Secretariat, Academy of Medicine, 4A College Road, Singapore 0316, Tel. 2238968/2245166

Aug 25-26, 1984: Mandarin Hotel, Singapore  
**ASEAN Workshop on Cardiac Pacing**  
Info: The Secretariat, ASEAN Workshop on Cardiac Pacing, 3 Mt. Elizabeth, No. 09-03, Mt. Elizabeth Medical Centre, Singapore 0922.

Sep 12-15, 1984: Ming Court Hotel, Kuala Lumpur  
**2nd International Combined Scientific Meeting**  
Info: Secretariat, 2nd International Combined Scientific Meeting, c/o Malaysian Medical Association, MMA House, 124 Jalan Pahang, Kuala Lumpur, Malaysia.

Oct 28-31, 1984: Mandarin Hotel, Singapore  
**36th World Medical Assembly**  
Info: The World Medical Association, Inc, 28 Avenue Des Alpes, 01210 Ferney-Voltaire, France

Nov 1-4, 1984: Shangri-la Hotel, Singapore  
**Joint Meeting of The Royal College of Surgeons, Edinburgh & The Chapter of Surgeons, Academy of Medicine, Singapore**  
Info: The Secretariat, Academy of Medicine, 4A College Road, Singapore 0316, Tel. 2238968/2245166

Nov 16 - 19, 1984: Equatorial Hotel, Singapore  
**Commonwealth Medical Association 12th Council Meeting and Conference on "Freedoms in Medicine"**  
Info: Singapore Medical Association, 4A College Road, Singapore 0316. Tel: 2231264/2238767



## BOOK REVIEWS

**The Medical Annual 1984**  
**The Yearbook of General Practice**  
**Editor: DJ Pereira Gray**  
**Asst. Editor: Jill Pereira Gray**  
**PG Publishing Pte Ltd**  
**Price \$39/-**

The 1984 Medical Annual is again formatted into 5 areas corresponding consistently with the content of General Practice as defined by the RCGP.

These are:-

1. Health and Diseases,
2. Human Development,
3. Human Behaviour,
4. Medicine and Society &
5. Practice Organization.

The choice of subjects covered in each of these 5 areas remains the responsibility of the editors. This is not an easy task. In this year's annual a new feature in the form of an introductory chapter has been added. This introductory chapter reviews the past year in general practice.

The subjects highlighted in each of the first four areas have been in my view judi-

cious and topical.

In Area 5, I am a little disappointed to find only two articles and both of them dealing with subjects, perhaps very dear to the British GP, but unlikely to evoke much enthusiasm or interest in readers outside the UK. These are "Recent changes in the terms of service of NHS practitioners" and "The practice nurse". Articles with a more liberal dose of "what makes a practice tick" will appeal more strongly to readers outside the UK.

My personal choices in this annual are the following articles:-

- \* Dietary Fibre - a way of preventing western diseases?
- \* The role of the GP in the care of malignant disease,

**Practical Problems in Dermatology**  
**by Prof Ronald Marks**  
**PG Publishing Pte Ltd**  
**Price \$55/-**

This is a concise book on a practical approach to dermatology. The style of writing makes it pleasant to read. It is practical and concise and as a consequence it therefore lacks depth. The book has an unusual approach. Dermatological conditions are discussed in relation to specific groups i.e. in relation to ages, sports etc. This makes it a good book to look to for a practitioner when he is faced with various dermatological problems for differential diagnosis. However this has made the book a poor reference book for practitioners who wish to use it to refer to a specific dermatological condition as he will then have to flip through various chapters in order to have an overview of a specific condition.

The content of the book is extremely practical and useful. The practical points to note at the end of each chapter is an extremely

useful summary for readers to refer to and remember. Many simple and common sense treatment are stressed. These are often overlooked by practitioners. In this aspect the trainee dermatologist may find it useful too. The chapter on 'When to refer for specialist opinion' is useful for those in general practice who may sometimes be faced with a quandary as to when to refer. The many colour plates are extremely well chosen and taken. This certainly enhances better understanding of the often confusing descriptive terms used in dermatology.

On the whole, this is a good book for those who have little dermatological background. However, those who already have some dermatological experience will find the book less informative. ■

**Dr Goh Chee Leok**

- \* Serious illness in children
- \* A study of preventive care in one general practice,
- \* Facts and figures,
- \* Current controversies in medical ethics,
- \* Muslim patients and the British general practitioner &
- \* The health of doctors' families.

The article mentioned last in the above list of preference discusses the health problems connected with the doctors' families from the family's point of view. It is a subject which has not been dealt with in

Singapore with the candour and seriousness it deserves. I certainly would like to urge every medical doctor to read this article. Is the doctor's wife the most neglected patient in the community? Is she more neurotic in coping with illness when compared with her "sisters" whose husbands are non-medical professionals? Are there other circumstances in which she may suffer through her husband being a doctor? These are some of the questions discussed. As for doctors' children, the relation-

ship problems they have to cope with are even more complex.

Personal choice is often determined by multi-dimensional judgements and many of these are the result of deep-seated psychological factors. Whatever one's choice, and this may be as varied as there are doctors, there are enough articles in the annual to satisfy the most exciting and discerning of intellectual taste-buds. ■

**Dr Leong Vie Chung**

### Editor's Note:

The above publications are available at PG Lucky Plaza Medical Bookshop at 20% discount.

**IN THE STOMACH**  
the acid environment prevents release of active drug - minimising local gastric irritation.

**IN THE INTESTINE**  
the more alkaline environment initiates the gradual diffusion of ketoprofen from the pellets - programmed for effective control of symptoms for 24 hours.

unique pH-sensitive dialysing membrane

ketoprofen

**NEW ONCE-DAILY**

**Oruvail** 2 CAPSULES o.d.

ketoprofen

**Programmed to control your patients' symptoms 24 hours-a-day**

**Prescribing information**  
**Dosage:** Orally with food, 100-200mg once daily.  
**Contra-indications:** Recurring history of/ or peptic ulceration, chronic dyspepsia, use in children, in patients sensitive to aspirin or other non-steroidal anti-inflammatory drugs known to inhibit prostaglandin synthetase or with bronchial asthma or allergic disease.  
**Precautions:** Pregnancy, lactation. Dosage of concomitant protein-binding drugs may need modification.  
**Side-effects:** Occasional gastro-intestinal intolerance. Very rare gastro-intestinal haemorrhage/ skin rashes.  
**Presentation:** 100mg capsules PL 0012/0133.  
**Basic NHS Cost:** (Jul 82) 100mg capsules  
Oruvail is a trade mark.

**M&B May & Baker**  
May & Baker Ltd, Dagenham, Essex RM10 7XS MA 1413



Cont'd from page 3

tralized policy and decentralized administration.

Mr Sloan's concept of management of a great industrial organization, expressed in his own words as he finally evolved it, is "to divide it into as many parts as consistently as can be done, place in charge of each part the most capable executive that can be found, develop a

system of coordination so that each part may strengthen and support each other part, thus not only welding all parts together in common interests of a joint enterprise, but importantly developing ability and initiative through the instrumentalities of responsibility and ambition - developing men and given them an opportunity to exercise their talents both in their own interests as well as in that

of the business. (The Development and Growth of General Motors, A statement before the U.S. Senate Committee on the Judiciary, Washington, 1955, p.8.)"

Centralized policy and decentralized administration may be a concept worth further exploration in the context of our hospital management. ■

GLG

## FEEDBACK LOOPS

Cont'd from page 4

rather wait till external pressures be brought to bear before remedial action is taken? Consider the junior staff who are training under your wings. What type of training are they receiving? Is it fair to them? Should the Ministry continue to post trainees, students to such a department and watch them suffer through wrong training or lack of supervision and training?

Feedback can be thoroughly biased. Statistics can be doctored. But all the feedback that SGMDPOA ever gives to the Ministry and to no one else is on the understanding that the information is the result of interviews and informal discussions among the grass roots. It is not the accumulated evidence, scientifically proven, of any changing situation that is beyond the resources of the union. Rather than depend on percentages of this and that, the one personal testimony if that is all that can be forthcoming, of a truthful, honest, sincere doctor willing to speak his mind unfearingly, is to my mind, better than all the studies, retrospective or prospective, to prove any point in question.

What is feedback for? As in the human body, feedback from a member component is for the purpose of adjustment and change. That is why there is a loop - an afferent arm and an efferent arm. It is in the purview of the Ministry of Health to explore further the feedback it receives, of which the SGMDPOA is but one source, but an important source. It has the resources, the authority and the power to direct specific investigations, to convene boards of inquiry and the like for the express purpose, again not to apportion blame, but to improve the system. If after a few such exercises MOH should find the SGMDPOA's feedback nothing but trash then it need not waste its time any more with the union. If the suggestions of the union are not practical throw them out. But if on the contrary, our feedback is corroborated by more reliable sources or after detailed probing,

and the end result is improvement in the system, then the union is a useful partner in employer-employee relationships. The loops must be complete, otherwise feedback only generates misunderstanding and enmity, which cannot help teamwork and cooperation among doctors and other health allied professionals for the benefit of patients.

The trend in MOH appears to be the split single departments of one specialty into two - either completely as two separate departments or halfway as two teams. Its aims, if I perceive it right, is to foster healthy competition under the same set of rules. Each team leader or department head can do things his way provided results bear out its superiority. However to compare a Government with a University department would be unfair because there is no equality of staff number to start off with. This I do not wish to delve into. Each department has its regular unit meetings and feedback direct to senior staff should result in appropriate changes - this is the short feedback loop. One step higher is feedback at the heads of departments meeting with the hospital director - this is the middle feedback loop. Higher still is the long feedback loop at MOH level and this is where representation by SGMDPOA on behalf of its members who are themselves involved in the short feedback loop, takes place. Once you understand these loops of feedback you will not misconstrue the actions of the union. The long feedback loop is activated if all the other loops to enact actions have failed and the SGMDPOA cannot remain silent any longer without the possibility of being accused by its membership that it is not promoting the welfare of its members. Because it is a long feedback loop, there is temporal delay but that in no way lessens its effectiveness. Time to think and time to act ensures that precipitate words and deeds that are to be regretted will not occur. ■

There's one  
hepatitis B vaccine  
for the whole family



and it's proven safe and effective!

**hevac B pasteur<sup>®</sup>**

TRADE MARK  
Institut Pasteur  
PRODUCTION



Produced according  
to the latest WHO requirements  
for Hepatitis B vaccine

Over 2 million doses  
used to date!

**sanofi pharma international**

F.E. ZUELLIG (Trading) Pte. Ltd.  
14 Shaw Road, Singapore 1336, Tel: 2831155

#### REFERENCES

IAN D GUST:  
Current status of active immunisation against Hepatitis B infections. 8th Scientific Meeting of the Malaysian Society of Pathologists, University of Malaya, KL, 19 Nov 1983.  
S K LAM:  
Hepatitis Vaccines: Safety and future. APASL Scientific Meeting 12 - 14 Jan 1984 Bangkok.  
LAPLANCHE, A et al:  
Responses to Hepatitis B Vaccine. Lancet, 1982, i, 222.  
M T NUTINI, et al:  
Hepatitis B Vaccine: Clinical experience and safety. The Lancet, 3 December 1983.  
MAUPAS, P et al:  
Efficacy of Hepatitis B Vaccine in prevention of early HBSAG carrier state in children. Controlled trial in an endemic area. Lancet, 1981, i, 289 - 292.  
MAUPAS, Ph et al:  
Active immunisation against Hepatitis B in an area of high endemicity. Prog. Med. Virology, 1981, 27, 185 - 201.

BARIN, F et al:  
Immune response in Neonates to Hepatitis B Vaccine. Lancet, 1982, i, 251 - 253.  
CROSNIER et al:  
Randomised placebo-controlled trial of Hepatitis B surface Antigen vaccine in French haemodialysis units: II, haemodialysis patients. Lancet, 1981, i, 797 - 800.  
CROSNIER, J et al:  
Randomised placebo-controlled trial of Hepatitis B surface Antigen vaccine in French haemodialysis units: I, Medical staff. Lancet, 1981, i, 455 - 459.