Paradigm Shifts in Organ Transplants

n this month's SMA News, we re-examine organ transplantation. Organ transplantation is not new to the medical profession, of course, but continues to attract enormous interest in the lay media. The concept that we can remove a diseased organ and replace it with a healthy one never fails to generate fascination and excitement. Dr Christian Bernard is a well-known personality, perhaps more so than many Nobel prize winners, largely because he performed the first heart transplant in the world. In recent years, new research in immunology and immunosuppression,

organ harvesting, storage and transport, and improvements in microsurgical techniques have made transplants a viable option for an increasing number of disease conditions. We have evolved from one of transplanting kidneys from twins and immunologically similar relatives, to one of transplanting organs from genetically unrelated living donors and cadaver donors.

The critical issue has come down to the supply side of the equation: how do we find enough donor organs to replace the ones that are diseased? The "voluntary" system of donation, as an act of philanthropy, has its limitations. A radical alternative solution that has been suggested is to let the market forces (the "invisible hand") regulate the supply and demand of organs for transplants, and thus, treat organs as commercial commodities. Obviously, this is controversial and goes against the grain of traditional medical thinking. Therefore, we need to examine closely the advantages and potential problems of such a solution before we fully embrace it. These issues are examined in detail in invited articles featured in the News this month.