



Promising treatment for kidneys

A combination of drugs is highly successful in treating kidney ailments

by Lennard Bickel

Australians probably rate as the most kidney-conscious people in the world. In recent years, Australian medical scientists have found themselves facing a national renal problem greater per capita than most other nations in the world.

In seeking out the causes, the National Kidney Foundation of Australia unearthed some interesting facts. Australia has the highest death rate from kidney failure of any Western nation, at least twice that of the United States, and patients with illnesses related either directly or indirectly to kidney problems fill one of five hospital beds. But perhaps the most astounding finding was that the rate of death in Australia from the effects of analgesics on kidneys is 50 times that of the United Kingdom.

The analgesic under fire is phenacetin, contained in APC. This combination of aspirin, phenacetin and caffeine is used to combat vague unwell feelings, hangovers and generalized aches and pains. In Australia, the population downs APC automatically, often through sheer habit. Sold in every cafe and corner shop on the continent, the drugs have become a national addiction.

In the United States, the Food and Drug Administration warned against the use of phenacetin-containing products for the past five years, and most drug companies have substituted other analgesics for phenacetin. The report of an FDA advisory committee states that while no specific lesions can be ascribed to phenacetin-containing analgesics, there is frequent association between their use and kidney lesions. The warning label now approved by the FDA contains the statement that "phenacetin may damage the kidneys when used in large amounts or for a long period of time."

Ten years ago in Australia, when the increase in deaths from kidney disease became apparent, the alarm was raised. Psychiatrists warned the people that they were hooked on the drug to the same extent they could be hooked on beer, meat pies and surfing.

It was also no accident that Australian surgeons were among the first to perform renal transplants. Today nearly 300 are carried out each year, with a success rate of about 80 percent. To wipe out the 20 percent failures the nation is instituting a continental supply service of kidneys and a computerized standard selection of tissue-typing, similar to that growing in the United States. (See p. 295).

In addition, a victory over the main

killer, Bright's disease, or acute nephritis, may soon be claimed. A preliminary report from a Melbourne group, including Dr. Priscilla Kincaid-Smith, an international authority on kidney disease, and Drs. M. C. Laver and K. F. Fairley, brims with enthusiasm and confidence in a new therapy.

Employing a combination of drugs normally used against hypertension and blood clotting, the researchers have returned to normal health a string of successive irreversible cases sent to them for transplant. At the worst, only slight impairment of kidney function remained in one or two patients.

The success appears to come from the action of the anticoagulants with the antihypertensives. The anticoagulants dissolve the platelet thrombi, or clumps, that block kidney capillaries and stop the normal flow of blood through the kidneys. The antihypertensive expands the blood vessels.

The drugs used are combinations of heparin and phenindione, which are anticoagulants, and dipyridamole, prednisolone and a variety of antihypertensives, along with a low-salt diet. The researchers also claim the therapy has a high value in halting the damaging process of rejection in transplants.

The drugs may also be useful in a wide spectrum of renal disease. Says Dr. Kincaid-Smith, "We have had successive and continued improvement in cases sent to use as irreversible acute failure due to glomerular lesions, and we now seek no further proof of the value of anticoagulants. Moreover, in cases of the grafted kidney we have evidence of functional and structural improvement with this therapy."

The researchers are seeking to clarify whether the active drug is heparin, or the other drugs, or specific combinations.

The technique is being clinically tested at hospitals in other cities, and investment into further research is being sought so that full potential can be realized.

"This is a breakthrough we have been searching for," says Dr. H. H. Pearson, medical director of the Australian Kidney Foundation. "It's as big as the dialysis machine and organ grafts. Work is under way in other cities and we shall see a dramatic drop in the death roll two or three years from now."

But even if Bright's disease is prevented, the Australians still must solve the problem of APC powders. Some think legislation is the only answer.