South African Medical Journal

Suid-Afrikaanse Tydskrif vir Geneeskunde

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DIE VERVANGING VAN GROOT ARE

'n Nuwe mylpaal op die gebied van chirurgie is die vervanging van beskadigde bloedvate deur nuwes. Operasies wat toestande soos saampersing van die aorta, buikaorta-aneurisma en trombose van grotere slagare herstel, is nie meer sonderling nie en alhoewel hierdie operasies nog lewensgevaarlik is, is hul lankal nie meer medies voorbladnuus nie. Dit het al 'n instelling in baie sentrums geword om groot seksies bloedvate, wat deur vernouing, fibrose of ontsteking aangetas is, te vervang.

Alhoewel vatvervanging tot nog toe grotendeels tot die slagare beperk is, is aandag onlangs gevestig op die moontlikhede om in geval van obstruksies groot are soos die boholaar te vervang. Hierdie prosedure lewer groter probleme. Die wande van die are is dunner en derhalwe vou hul makliker op en druk hul makliker plat; en die druk in die are is te laag om die buisholte oop te hou op dieselfde manier wat die druk in die slagare dit doen. Aaroorplantings is dus meer geneig om te kinkel as slagaaroorplantings, met drastiese gevolge, aangesien dit 'n uitstekende terrein voorsien vir die vorming van 'n bloedklont. Deterling en Bhonslay[1] het onlangs proefnemings met honde gedoen en die boholaar met seksies aorta vervang. Hul het gevind dat 'n maand nadat die operasies gedoen is nie 'n enkel oorplanting patent was nie; almal is deur bloedklonte verstop. Hierdie komplikasie is waarskynlik ook die grootste struikelblok by die mens.

Nietemin bied gelyksoortige aorta-oorplantings (*aortic homografts*) tans waarskynlik nog die grootste hoop vir ingrypende behandeling van die sogenaamde boholaarsindroom. Die handboekbeeld van hierdie toestand—aanhoudende sianose, oorvulling van die are van die kop en nek, met hewige hoofpyne en miskien asemnood—word nie altoos waargeneem nie; somtyds is daar geen simptome nie. Die toestand vererger gewoonlik omrede van die sombere prognose wat aan die oorsakende faktore verbonde is—kwaadaardige mediastinumgewasse (die algemeenste oorsaak), aorta-aneurisma, kroniese fibrosende middelvliesontsteking en teringagtige middelvlieslimfkliere. Tensy die oorsakende obstruksie permanent verwyder kan word, is dit natuurlik nutteloos om die herstel van die boholaar te oorweeg soos bv. in die geval van kwaadaardigheid of aneurisma. Met 'n goedaardige gewas of 'n veselweefselmassa of tuberkuleuse kliere wat uitgesny kan word is die posisie egter heel anders. Nadat die meganiese

EDITORIAL

REPLACING LARGE VEINS

One of the recent advances in surgery is the replacement of diseased or damaged blood-vessels by new ones. Operations rectifying such conditions as coarctation of the aorta, abdominal aortic aneurysm, and thrombosed major arteries, are no longer exceptional and, although they remain procedures hazardous to life, they have long ceased to make surgical headlines. The replacement of large sections of stenosed, fibrosed or phlebitic blood-vessel is an established procedure in many centres.

While most of the work done in vessel replacement so far has been on arteries, recent attention has been focused on the possibilities of replacing veins such as the superior vena cava in cases of obstruction. This procedure poses greater problems, for the veins have thinner walls, which make them more easily collapsible and compressible, and the venous pressure is too low to exert the same influence as the arterial pressure does on the patency of the lumen. It follows therefore that a venous graft is likely to angulate more easily than an arterial one, and with dire results, since this produces an ideal site for thrombus formation. In recent experiments in dogs, in which the superior vena cava was replaced by sections of aorta, Deterling and Bhonslay[1] found that one month after the operations had been performed not a single transplant remained patent; all had been occluded by thrombi. This complication seems to be the chief stumbling-block in human studies as well.

Nevertheless, aortic homografts appear to be the best hope at the moment in the radical treatment of the so-called superior-vena-caval syndrome. The text-book picture of this condition—persistent cyanosis and venous engorgement of the head and neck, with severe headaches and perhaps dyspnoea—is not invariably seen; sometimes there may be no symptoms at all. However, it is usually progressive, because of the sombre prognosis attached to the causative factors—malignant mediastinal tumours (the commonest cause), aortic aneurysm, chronic fibrosing mediastinitis, and mediastinal tuberculous lymph-glands. Of course, unless the causative obstruction can be permanently relieved, there is no point in considering a superior-vena-caval repair, e.g. in malignancy or aneurysm. The position, however, is different with a benign tumour

druk op die aar verlig is en die aar blootgestel is kan 'n gelyksoortige oorplanting (*homograft*) uitgevoer word. In die 9 gevalle van oorplanting vir boholaarverstopping waaroor dusver verslag[2] gedoen is, was die resultate in 6 gevalle onbevredigend—in meeste van die gevalle het trombose na die operasie ingetree. Die 7de pasiënt het 4 maande na die operasie gesterwe en in die 8ste geval was die oorplanting 'n mislukking. Die jongste geval is die een wat deur Deterling en Bhonslay gerapporteer is met tuberkuleuse kliere as oorsaak van die obstruksie. Die segment van die aar met die trombose was uitgesny en vervang deur 'n gelyksoortige aorta-oorplanting (*aortic homograft*) wat al vir 18 maande hou en volkome verligting van die pasiënt se simptome gebring het. Geeneen kan hierdie reeks gevalle as suksesvol toejuig nie en hierdie werkers beklemtoon tereg dat verdere navorsing i.v.m. die vervanging van die groot are noodsaaklik is. As daar 'n oplossing te vinde is, skyn dit—vir die oomblik altans—of dit gesoek moet word by oorplantings met menseslagare eerder as met sintetiese stowwe soos, ,nylon' en ,dacron'; dit is maar nog gissing.

1. Deterling, R. A. en Bhonslay, S. B. (1955): *Surgery*, **38**, 1008.
2. *Annotation* (1956): *Lancet*, **1**, 144.

or a mass of fibrous tissue or tuberculous glands which, being resectable, are amenable to surgical treatment. After relieving the mechanical pressure on the vein and exposing it, a homograft can be performed. Of the 9 cases so far reported[2] in which superior-vena-caval obstruction has been treated by grafting, 6 have ended unsatisfactorily, most of them with post-operative thrombosis. The 7th patient died 4 months after operation, and in the 8th case the graft was a failure. The latest case is the one reported by Deterling and Bhonslay, in which tuberculous glands were the cause of the obstruction. The thrombosed segment of the vein was resected and replaced by an aortic homograft, which has held for 18 months and has 'completely relieved' the patient's symptoms. None can acclaim this series of cases as a success, and these workers rightly emphasize the need for further research into replacement of large veins. If a solution is to be found, then it seems—for the moment, at any rate—that it will lie in the field of grafts made from human arteries rather than those made from synthetic materials such as nylon and 'Dacron'; but this is still conjecture.

1. Deterling, R. A. and Bhonslay, S. B. (1955): *Surgery*, **38**, 1008.
2. Annotation (1956): *Lancet*, **1**, 144.

DISPENSING DOCTORS

The Minister of Health has omitted from the Medical, Dental and Pharmacy Bill the egregious clause which was to have denied to medical practitioners the right to dispense and supply medicine for their own patients within 5 miles of a municipality containing a chemist's shop. But the danger is still present, for though the clause is no longer in the Government measure it may yet be inserted on the motion of a private member. The Pharmaceutical Society of South Africa has for some time been agitating for legislation on these lines, and it is reported that members of Parliament have been receiving telegrams urging them to support the clause. The Medical Association and, it is understood, the Medical and Dental Council, have been active in their opposition.

It is a grave attack on the traditional rights and prerogatives of the medical profession. Let no one suppose that the right to dispense was conferred on medical practitioners by Parliament in the section of the Medical, Dental and Pharmacy Act, 1928, which the dropped clause proposed to amend. This Act largely repeated former legislation and gave legal sanction to custom. The fact is that from the dawn of Medicine, and for centuries, the patient looked to his doctor to supply the 'medicine' needed for his treatment. This conception is reflected in the very languages we talk, for in English and Afrikaans the word 'medicine' (or *medisyn*) stands both for the healing art itself and the *materia medica* which the patient receives. Once upon a time an apothecary was a medical practitioner, and a registrable licence to practice medicine is still conferred by the Society of Apothecaries, London and Apothecaries' Hall, Dublin.

We need not go back to the middle ages to hunt down this tradition. In the memory of people still living most general practitioners kept a dispensary and made up the medicines they required for thier patients. Busy practitioners came to relegate the dispensing to assistants and, as the custom grew of handing the prescription to the patient to be made up by a dispensing chemist, dispensing by doctors grew less until now the general practitioners who do not ordinarily dispense probably greatly outnumber those who do.

Nevertheless, dispensing still remains a proper function of the medical practitioner. In the platteland many doctors still dispense, and even in the larger towns there are doctors who carry on the old tradition. Probably most general practitioners sometimes meet the convenience of a patient by supplying him with some medicament that he needs. In Provincial and Government hospitals it still falls to the doctor to work in the dispensary outside the hospital pharmacist's working hours, and in some small hospitals no pharmacist is employed at all. While, then, a great number of medical practitioners have found it convenient to leave dispensing to the chemist, the profession has never abandoned—nor has it been allowed to abandon—its function of dispensing.

This is a matter that can safely be left to settle itself without legislation. As towns and villages develop chemist's shops will become available for an increasing proportion of the population, and the number of doctors who regularly dispense their patients' medicine will become smaller. Probably dispensing by doctors will never entirely cease, nor, in our opinion, is it desirable that it should. A law making it a criminal offence or an ethical delinquency for doctors to

exercise their time-honoured function of dispensing for their patients, within a certain distance of a chemist's shop, would in our opinion be an affront to an honourable profession. Nor would it be in the public interest. No doubt as many towns and villages as possible ought to have the amenity of a pharmacy, but not by legislation of this kind. Besides, the chemist and druggist is by no means exclusively dependent on doctors' prescriptions. Most chemists sell household remedies, patent medicines, and any other medicine not forbidden by law to be sold, and are ready to give advice about treatment from the patients' symptoms; and their trade is usually not confined to medicaments. The interests of the non-Europeans have been cited as an argument in favour of the clause. Can it be in the interests of the poor to require that the patient shall not only be responsible to the doctor for his fee, but shall pay a chemist as well? And might it not well be a hardship to enforce a journey up to 10 miles or more to obtain the medicine which the doctor has ordered?

Finally, is it just or reasonable that a doctor who is earning his living by carrying on a dispensing practice within the 5-mile limit should suddenly be required by law to cease; and that outside that limit dispensing doctors should be exposed to permanent uncertainty lest a chemist's shop should be opened in his neighbourhood.