

EDITORIAL : VAN DIE REDAKSIE

CLOSING THE GAP

Between what can theoretically be done for the benefit of the patient and the treatment that is actually given there exists a gap. It is the aim of organized medicine to reduce this as far as possible, and the quality of a medical service may be assessed by the size of this gap; the better the service, the smaller the gap.

Some factors affecting this gap which come into consideration are quite beyond the control of the medical profession. For example, how soon a woman who finds a lump in her breast first presents herself for medical examination is only partly dependent on education or on propaganda. Deep emotional currents sway the decision in such a woman before she steels herself to come and have her mind set at rest, as occurs in the majority of instances, or gives herself the best possible chance of successful treatment should the condition unfortunately prove to be non-benign. Another example is the man who stolidly persists in neglecting his diabetes until he finally presents with a gangrenous foot, a stroke or optic atrophy. All that medicine can offer him at that stage is palliation, whereas satisfactory control may well have postponed the serious complications indefinitely.

But perhaps the value of immediate informed medical attention can best be observed in the field of traumatic surgery. The most shining example of this is the series of figures issued by the US Medical Corps who, in the Korean war, succeeded in saving from death more than 97% of the casualties who were admitted alive to their forward clearing stations.¹ This remarkable figure shows how close to perfection modern medicine can come, if given the chance. The figure is one that should be constantly before the eyes of all those who are responsible for treating cases of trauma; while in itself a magnificent achievement, this figure does not reflect the remarkable reduction in mortality and permanent damage, which must have been immense.

Naturally, military discipline and efficiency cannot be reproduced under all varieties of civilian conditions, but, even without regimentation of the treatment of casualties, much can be done to see that once an ambulance or a police station is informed of an accident, as complete and expeditious a service is made available as is humanly possible. It is easy to see where holes can be picked in our present facilities, but, while it may be possible to see that instructions are carried out by police and ambulance personnel who can, in such instances, be bound by para-

military rules and regulations, the thought of applying such methods to medical practitioners in general, in peacetime, is repugnant, since it negates the time-hallowed principle of letting each doctor do his best and relying on his professional integrity to see that the best is done.

But in wartime things are different, and as far as road injuries and traffic accidents are concerned we must consider that we are indeed at war. Even in our relatively underpopulated land, nearly 300 people are killed every month of the year on the roads, and about eight times as many are injured. This traffic war may be said to be just beginning. Our cars burgeon forth in size, shape and glossiness, our roads stretch forth with their black tarmac to the far horizons in broad lanes, overpasses, underpasses and bridges; but the elderly pedestrian, the halt, the lame, the child and the infirm, and particularly the tipsy pedestrian keep moving along at their usual slow rates and cannot attain supersonic speeds. They are unable to cope with the new situation. It is necessary to be quick to remain alive in the traffic these days. Are all our appointments really necessary every minute of the day? To avoid being dead one must indeed be quick. Who shall quicken our halt? Who halt our quickness?

It would seem that all mechanical objectives to which our living is geared are becoming more quick and more crowded. The only thing that has not changed is the pedestrian and his speed; and he is often old, halting, and not uncommonly slightly alcoholic. Must all these people be subjected to the manifold increases in risk? Perhaps we ought to press for safety zones in our cities where the roads should be entirely cleared of vehicular traffic. Have we lost our sense of proportion in these matters? Perhaps narrower roads, more corrugations and governors fitted to our cars would, on balance, be a rewarding programme. No state can afford to lose its children, even its careless children, or, indeed, even its infirm and halt. There are advantages in a traffic organization that is geared to the pace of the ox. The wry old saying that pedestrians are divided into the quick and the dead takes on a new significance when a close relative has not been quick enough to survive an onrushing car. We all grow slower in the course of time. Must the tremulous, the tumbled and the toddlers all be subjected to these risks of death or maiming —sacrificed on the altar of speed?

1. Holmes, R. H. (1953): *Recent Advances in Medicine of Military Importance*. Washington, D.C.: Walter Reed Army Medical Centre.

MONITORS IN DIE OPERASIESAAL

Volgens die meeste woordeboeke is 'n monitor iemand of iets wat vermaan, waarsku of tereg wys. Die meeste van ons verstaan egter veel meer geredelik die term monitor wanneer dit verwys na ons bekende Suid-Afrikaanse akkedis met sy vorkvormige tong. Geneeshere het egter onlangs heelwat gehoor van monitors in die operasiesaal

om groter veiligheid aan chirurgiese pasiënte te besorg, en veral om hart-long omleidingsoperasies te laat slaag.

Vêrreweg die veelsëggendste fisiologiese parameter wat 'n mens kan monitor is die bloeddruk. Nogtans is dit 'n feit dat dokters nie hiertoe in staat was voor die eerste dekade van die huidige eeu nie. Fisioloë en farmakoloë

was natuurlik 'n eeu vantevore reeds besig om akkurate bepalinge te maak van arteriële bloeddruk,¹ en dit is grotendeels aan hul pogings te danke dat daar vandag maklik direkte lesings gemaak kan word, afgesien van die drie indirekte alledaagse metodes, nl. die ouskultatoriese, die ossilografiese en die palpatoriese indekse van die bloeddruk.

Die ossilografiese metode is die tradisionele metode van die narkotiseur, en die meeste narkotiseurs maak vandag gebruik van die oorspronklike Franse Boullit of Duitse Von Recklinghausen ossillometers met hul vindingryke dubbele rubbermansjet. Hierdie nuttige toestel is tereg gewild onder narkotiseurs dwarsdeur die Westerse wêreld; maar, soos alle indirekte metodes, skiet die ossillometer ook tekort wanneer die sistoliese druk onder sowat 70 mm. kwik val, veral ten tyde van, of na afloop van hipotermie, en natuurlik ten tyde van 'n ekstrakorporeale bloedsomloop.

Transistor elektroniese baumanometers is effe duurder, miskien meer wetenskaplik, en sekerlik sierliker as die ossillometer, maar net so onderhewig aan mislukking veral wanneer die haarfynbepaling van die bloeddruk op sy belangrikste is teen lae sistoliese drukke. Oksimetrie is sonder twyfel vandag die metode van voorkeur as indeks van die bloeddruk ten tyde of na afloop van 'n ekstrakorporeale bloedsomloop.²

Wat al die ander monitors betref, is dit 'n feit dat chirurgie die al-hoe-meer-indrukwekkende bedrywighede en toestelle van die moderne narkotiseur met agterdog gadeslaan. Alhoewel dit die eerste monitor was wat gereeld klinies toegepas is, word elektrokardiografiese toestelle maar bitter weinig vandag in die operasiesaal aangetref. Die elektro-ensefalograaf se waarde in die juiste bepaling van die diepte van die algemene narkose is onbetwyfelbaar, maar so duur dat selfs ons universiteite maar afsien daarvan. Die bloed pH en die konsentrasie van suurstof en koolsuurgas kan veel goedkoper en gereeld bepaal word met die suurstofverbruik van 'n kunsmatige long, en temperatuurbepaling in spesiale gevalle. Daar moet dikwels gekies word tussen die tegniese moeilike, maar weten-

skaplik bevredigende bepalinge van die totale biologiese status, en die realistiese feit dat hoe meer monitors daar is, hoe meer kans daar ook is vir instrumentele en menslike feilbaarheid. Aangesien al die vitale tekens, hetsy hemodinamies of metabolies, almal onderling verband hou met mekaar, hoef hulle geensins almal bepaal te word nie.³

Baie lesers sal nou wil weet wat van die fonokateter⁴ en die talryke fluit-en-flits instrumente wat kan aandui of 'n bepaalde silinder amper al sy inhoud kwytgeraak het, of die perifere sirkulasie afdoende is, en wat die neuromuskulêre toestand is soos aangedui op die elektromiograaf of altans as gevolg van perifere senuweestimulasie (met gevolglike inligting insake die nuttigheid van spierverslapper-antagoniste). Die heel eenvoudige metode sonder ingewikkelde instrumente van veneuse drukk bepaling deur 'n kannule in die vena jugularis externa⁵ verdien sekerlik 'n wyer toepassing.

Chirurgie moet maar gewoon raak aan al hoe meer monitors in die operasiesaal na gelang die moderne anesthesiologie vordering maak in die wetenskaplike sin liever as in die sin van 'n kuns. Narkotiseurs op hul beurt moet onthou dat 'n mens die meeste leer deur sorgvuldig die kliniese tekens van narkose dop te hou—die aksie van die hart (as dit ontbloot is), die opstyg en val van die longe, die kleur van die bloed, die ekskursie van die bors, die weerstand wat gebied word teen saampersing van die reserwe-sak, die polsslag, hart en long geluide deur 'n stetoskoop, ens. Apnee kan herken word sonder 'n oksimeter; en 'n koue, klam vel kan meer betekenisvol wees as die bloeddruk—dit is moontlik om met volle aandag verruklik na 'n interessante elektrokardiografiese ritme en aktiwiteit te kyk, met die rug op die pasiënt gekeer, terwyl laasgenoemde al geruime tyd klinies morsdood is.⁵

1. Burch, G. E. en DePasquale, N. P. (1962): *Primer of Clinical Measurement of Blood Pressure*. St. Louis: C. V. Mosby Co.
2. Galletti, P. M. en Brecher, G. A. (1962): *Heart-Lung Bypass. Principles and Techniques of Extracorporeal Circulation*. New York: Grune & Stratton.
3. Glasser, O., red. (1961): *Medical Physics*, Deel 3. Chicago: Year Book Publishers.
4. Sellick, B. A. (1962): *Proc. Roy. Soc. Med.*, 55, 190.
5. Sabawalla, P., Gunter, R. en Dillon, J. B. (1957): *Anesthesiology*, 18, 236.

DISSEMINATED SCLEROSIS IN SOUTH AFRICA

Disseminated (multiple) sclerosis is of considerable interest because of the peculiar fact that this disease, which is the most important disease affecting the nervous system in Europe and North America, is extremely uncommon among South African-born Whites and, so far, there has been no single authenticated case of the disease among the Bantu population. However the disorder is very common among immigrants to South Africa from Europe.

Research into multiple sclerosis in the United States, Britain and other European countries has been greatly aided by the formation of the National Multiple Sclerosis Societies of Britain, America, etc. These Societies fulfil two needs: they encourage research into the cause of the disease, the aetiology of which is still unknown, and they assist, in a practical way, persons suffering from the condition.

Considerable research in this field is also being done in South Africa and recently the South African National Multiple Sclerosis Society was formed, with three Chapters based in Johannesburg, Cape Town and Durban. The National Secretary is Mrs. I. Henderson, 295 Villiers Road, Walmer, Port Elizabeth. The Secretary of the Transvaal Chapter is Mrs. J. Nass, P.O. Box 10319, Johannesburg; the Secretary of the Cape Chapter is Mrs. K. M. Bestall, 3 Protea Flats, Protea Avenue, Fish Hoek; and the Secretary of the Natal Chapter is Mr. Les van Rooyen, 33 Kensington Drive, Durban North.

The Society is anxious to trace all persons suffering from the disease in this country and appeals to all doctors who have such patients to contact the local Secretary of the Society. In so doing, previously unnotified cases will be brought to the notice of the investigators who are conducting a survey of the disease.