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VAN DIE REDAKSIE : EDITORIAL

DIE BEDREIGING VAN DIE TEGNIESE SPOOK

Daar is onlangs in die dagbladpers berig dat 'n rekenmasjien in Londen 'n meer akkurate diagnose van die toestand van 88 pasiënte met tiroïedsiekte gemaak het as 'n spesialis. Die rekenmasjien is vooraf ‚gevoer' met inligting uit die ervaring en kennis van 'n groot aantal dokters ten opsigte van die kenmerkende simptome van drie groepe van pasiënte, elk met 'n verskillende vorm van tiroïedsiekte. Daarna is die toestand van die 88 toetsgevalle vir diagnose aan die masjien onderwerp sowel as aan klinici, en die ‚diagnose' van die masjien was meer akkuraat as dié van die klinici.

Die direkteur van hierdie outomatiese masjien-eenheid sê dat die masjien se ‚geheue' foutloos is en dat die kennis van 'n groot aantal konsultante dus behoue kan bly. Om die masjien te gebruik is net soos om 'n kollega te bel, sê hy verder, behalwe net dat die masjien dadelik die gesamentlike ervaring van 'n groot aantal konsultante, en nie net van een nie, vertolk.

Rekenmasjienentoesiaste stel dit baie duidelik dat hierdie soort masjien, na hul mening, geen groot bedreiging inhou vir die gewone dokter-pasiënt verhouding nie. Die dokter moet nog die simptome uitsoek, die finale diagnose stel en behandeling voorskryf.

Soos ons dit sien, is die saak egter nie so eenvoudig nie. Hierdie ontwikkeling verteenwoordig maar een rigting in die medisyne wat al gedurende 'n hele aantal jare besig is om op die voorgrond te tree en wat ons, by gebrek aan 'n beter term, die ‚ontmensing' van die medisyne kan noem.

As ons sê dat ons verontrus is oor die soort van tegniese ontwikkeling waarna ons hierbo verwys het, dan beteken dit nie dat ons noodwendig konserwatief is wat betref nuwe ontwikkelinge van tegniese aard nie. Ons kan die verloop van sake in die vinnig-ontwikkelende wêreld van vandag nie keer nie. Ons sou dit ook nie noodwendig wou doen nie al kon ons ook.

Maar ons moét waarsku omdat ons die ‚skrif op die muur' bemerk. Die kliniese medisyne dryf reeds lank al weg van die mens af. In sommige van ons eie hospitale moet ons steeds waak teen die onoordeelkundige gebruik van diagnostiese apparaat en die toets-fusillade wat soms dreig om die oorhand te kry. En in sommige van die Europese hospitale, wat voorheen as ons voedingsbodem gegeld het, het die praktyk van ‚vertegnisering' alreeds sulke afmetings aangeneem dat pasiënte *voordat* hulle by die konsultant kom, onderwerp word aan die hele battery van tegniese toetse—insluitende röntgenondersoeke van kop tot tone en alle moontlike biochemiese ondersoeke, afgesien van wat die klagte en kwale van die pasiënt ook al is.

Dat ons in die medisyne geweldige vooruitgang gemaak het, val nie te betwyfel nie. En dat ons op grond van die moderne mediese wetenskap in staat is om siektetoestande veel beter en veel grondiger te hanteer as ooit tevore, is net so waar. Maar, die behoefte van verreweg die meeste mense gaan veel dieper as net aan 'n onbesproke wetenskaplike benadering. Dit is die vrese en angste, maar ook die versugtinge en die hoop en ideale wat mense op die lang duur aan die gang hou. En dit is veral hierdie bykomende menslike reaksies wat gedurende siektetydperke die neiging toon om meer definitief na die oppervlakte toe te kom.

Ons probleem in die moderne medisyne, soos ook in baie ander beroepsvertakkinge van die lewe, is hoe om die basiese dilemma waarvoor ons te staan gekom het, die hoof te bied. Aan die eenkant is daar die feit dat die omvang van ons kennis so geweldig uitgebrei het, dat gespesialiseerde toespitsing op probleme en die gebruik van tegniese hulpmiddels van allerlei aard noodsaaklik geword het. En aan die ander kant is daar die uitdaging van hoe om die vinnig-vorderende vooruitgang van ons toenemende kennis op die beste manier te konsolideer en beskikbaar te stel deur middel van die toegepaste wetenskappe—waarvan die medisyne een van die beste voorbeelde is—en wel op so 'n manier dat ons nie die hele tegnologiese professionele lewe wen en tog skade ly aan ons siel nie.

RHESUS ISO-IMMUNIZATION

In recent years, rapid progress has been made in many aspects of Rhesus iso-immunization. As with comparable developments in other fields, it has become more and more apparent that carefully planned management, leading to improved foetal survival, can only be performed in specialist units.

The problem of when and how iso-immunization occurs is slowly being unravelled. Woodrow *et al.*,[1] initially working on male volunteers but later on Rhesus-negative mothers themselves, have shown that sensitization occurs after foetal red blood cells have entered the maternal blood stream. In about two-thirds of the cases this occurs at the time of delivery and in the remaining cases it probably occurs during a minor or major traumatic antepartum episode, such as unexplained antepartum haemorrhage. Within a matter of three to four days, Rhesus anti-D antibodies are formed. Woodrow *et al.* have shown that if the foetal red cells can be destroyed within 36 hours, possibly even 72 hours of entering the maternal blood stream, then Rhesus anti-D antibodies are unlikely to form. For this purpose an anti-D gamma-globulin is now being used in a large-scale trial. Thus, in the very near future it will be necessary to take a smear within 24 hours of delivery of the maternal peripheral blood in every Rhesus-negative mother. If such a smear after special staining shows the presence of foetal cells, then the mother will need urgent treatment with high titre anti-D gamma-globulin so as to destroy the foetal cells before iso-immunization occurs. It is interesting to note that this destruction often occurs naturally where there is ABO blood group incompatibility between mother and foetus.

However, even with an effective and wide-scale preventative scheme in operation, it will take at least two decades before the many already sensitized mothers have passed

the child-bearing age. In these latter patients, there have been two great clinical problems, viz., (1) the need for a more accurate assessment of the foetal prognosis *in utero* than is available with routine tests of the maternal blood for anti-D antibodies and (2) a certain method for detecting whether the infant of a sensitized mother is Rhesus positive or negative, if the father is heterozygous for the D antigen. Liley[2] has shown that the amount of bile present in the liquor amnii surrounding the foetus of the sensitized mother gives a more reliable foetal prognosis than any maternal blood tests for antibodies and, at the same time, can indicate whether a foetus of a heterozygous father is affected or not, i.e. whether Rhesus negative or Rhesus positive. Liley has designed graphs which reveal which infants are liable to die *in utero* prematurely or, if born very prematurely, will be so severely affected as to have little chance of survival despite immediate replacement blood transfusion. For this group with an extremely poor prognosis, Liley[3] has developed and pioneered a technique of intra-uterine foetal blood transfusion which is life-saving to many such infants.

In this issue of the *Journal*, Grobbelaar and Trott discuss in detail some of these new developments and Craig *et al.* describe the first successful intra-uterine foetal blood transfusion performed in South Africa (pages 627 and 630).

In summary, it is necessary for all pregnant mothers to have a Rhesus blood grouping done as early in pregnancy as is possible. Any mother found to be sensitized, but especially those with an indirect Coomb's test with a titre of 1/16 or more diluted, must be immediately referred to a specialist unit. In the not too distant future all Rhesus-negative mothers with or without antibodies present will need a post-delivery peripheral blood smear examined for foetal red blood cells. If the latter are present, active treatment within 36 hours (possibly 72 hours) of birth, will be required to prevent the development of iso-immunization.

1. Woodrow, J. C. *et al.* (1965): Brit. Med. J., **1**, 279.
2. Liley, A. W. (1961): Amer. J. Obstet. Gynec., **82**, 1359.
3. *Idem* (1963): Brit. Med. J., **11**, 1107.

LABORATORIUMTOETSE BY DIE DIAGNOSE VAN KANKER VAN DIE PROSTAAT

Die akkuraatheid van die laboratoriumtoetse wat vir die diagnose van kanker van die prostaat gebruik word, is bepaal deur die verslae oor 837 pasiënte met hierdie kwaal na te gaan.[1] Die hoogtes van serum suur-fosfatase en alkalien-fosfatase is deur die King-Armstrong metode en bloedbesinking deur die Westergren metode gemeet. Die teenwoordigheid van beenuitsaaiings is deur röntgenstrale en die aanwesigheid van lae rugpyn bepaal.

Die groep van 837 pasiënte het 293 ingesluit wat nog nie tevore behandel is nie maar wat aldrie laboratoriumtoetse en minstens een röntgenondersoek ondergaan het; die aanwesigheid van lae rugpyn is ook in hierdie groep bepaal. By 57% van laasgenoemde groep is die diagnose bevestig uitsluitlik deur patologiese toetse, en geen *enkele* toets was meer behulpsaam as die ander nie.

Die gevolgtrekking is gemaak dat die pasiënt wat vermoedelik aan prostaatkanker ly (gewoonlik omdat die klier met betasting hard en ongereeld gevoel het of omdat daar 'n nodule aanwesig was), hoewel hy geen chirurgiese behandeling nodig het om obstruktiewe simptome te verlig nie, nogtans ál hierdie toetse moet ondergaan.

As die resultaat van enige enkele toets sonder verklaarbare rede abnormaal is, dan is 'n tentatiewe diagnose van kanker van die prostaat geregverdig. Nietemin, kan die moontlikheid van kanker nie uitgesluit word nie, selfs al is hierdie toetse almal normaal. Toevlug na 'n biopsie is dan die beste uitweg.

1. Burbank, M. K. *et al.* (1963): Postgrad. Med., **34**, 5.

COMMITTEE TO INVESTIGATE THE CARE OF MENTALLY RETARDED PERSONS

The Minister of Health has appointed a Committee to investigate the care of mentally retarded persons, and the following persons have been appointed to serve on this Committee:

Dr. A. J. van Wyk, Deputy Commissioner for Mental Health, Weskoppies Hospital, P.O. Box 874, Pretoria (Chairman);
Dr. W. L. D. M. Venter, M.P., House of Assembly, Cape Town;
Dr. C. H. de C. Murray, Chief Educational Planning Officer, Department of Education, Arts and Science, Pretoria;
Dr. N. J. du Preez, 6 De Waal Street, Stellenbosch;
Mr. B. K. Potgieter, Assistant Head, Technical Services, Department of Social Welfare and Pensions, Pretoria;
Mrs. J. M. R. Viljoen, P.O. Box 24, Bloemfontein; and
Mr. G. R. E. Kolver, Senior Administrative Officer, Weskoppies Hospital, P.O. Box 874, Pretoria (Secretary).

The Terms of Reference of the Committee are to investigate and make recommendations concerning:

(*a*) The extent of the problem concerning uneducable mentally retarded persons;
(*b*) the policy to be adopted by the Government concerning this problem, particularly with regard to the following aspects:
  (*i*) the fact that some of these children are educable (criteria will have to be determined);
  (*ii*) the provision of facilities for the training (where possible) of these children and, where necessary and desirable, for their accommodation;
  (*iii*) the responsibilities of the various State Departments arising out of any recommendation which may be made;
  (*iv*) how the existing private institutions and day work centres (with and without hostels) are to be linked up with the entire organization (special attention will have to be given to their financial requirements—compare with the State-subsidized schools under the jurisdiction of the Department of Education, Arts and Science).
(*c*) the financial and legal (if any) implications arising out of any recommendation made; and
(*d*) such other aspects which may have a bearing on the matter.

The Chairman of the Parliamentary Committee of Federal Council has directed that all Branches and Groups, who so desire, be invited to submit their own independent evidence directly to the Investigating Committee. Branches and Groups are, however, requested to forward copies of the memoranda submitted by them to the Association for record purposes.

The closing date for the submission of written evidence to the Investigating Committee is 31 July 1965, but the Secretary of the Committee has, however, indicated that an extension of time will be granted to those organizations who require it, provided written application for extension is made to him before the end of this month. The address of the Secretary is P.O. Box 874, Pretoria.