

VAN DIE REDAKSIE : EDITORIAL

PSIGOSOMATIESE ASPEKTE VAN DIE GENEESKUNDE

Soos die diagnose van kroonaartrombose met of sonder afsluiting vyftig jaar gelede baie selde gemaak is,¹ en dus eintlik 'n verskynsel van resente tye is, so het die psigosomatiek ook eintlik maar eers gedurende die afgelope dekade opgeleef. Die inisiatief op hierdie gebied het by die Amerikaners begin; in Amerika verskyn daar nagenoeg 400 artikels maandeliks oor hierdie onderwerp.²

By die simposiums en kongresse wat oor psigosomatiese aspekte van die geneeskunde gehou word, vind besprekings in verband met probleme van alle vertakings van die geneeskunde plaas. So word die psigosomatiese aspekte van die ginekologie, die interne geneeskunde, die snykunde, die kindergeneeskunde en selfs van die aanverwante ondervertakings soos die ortopedie, oor-, neus- en keelsiektes, ens. bespreek. Van die belangrikste probleme in hierdie verband wat opgelos moet word, is die interkorrelasies en gebiedsbestek van die psigosomatiek asook die verband tussen die psigosomatiese medisyne, aan die een kant, en die psigiatrie en die sielkunde aan die ander kant.³

Dit skyn algemeen aangeneem te word dat die psigososes en die ernstige funksie-stoornisse in die gebied van die psigiatrie val en dat suiwer sielkundige probleme deur kliniese sielkundiges behartig moet word, terwyl liggaamlike of somatiese verstourings, wat vermoedelik deur psigiese oorsake teweeggebring word, by die psigosomatiese medisyne tuishoort. In sommige sentrums, selfs aan mediese opleidingskole, word dit egter as vanselfsprekend aangeneem dat psigosomatiese toestande onder die interne geneeskunde ressorteer. Die gevolg is dat geneeshere, wat soms 'n baie karige sielkundige agtergrond het en nie genoegsame opleiding in die psigiatrie nie, hierdie toestand moet hanteer.

Om die emosies en die psigiese lewe van pasiënte, wat onderhewig is aan konflikte maar wat nie noodwendig neuroties is nie, bevredigend te hanteer, is 'n deeglike opleiding in die suiwer sielkunde sowel as die interne geneeskunde noodsaaklik. 'n Kennis van die neurologie is ook essensieel, maar die gemiddelde goeie internis beskik oor 'n voldoende neurologiese agtergrond om op hierdie gebied doeltreffend te kan optree. Die psigiatrie as sodanig dek ook nog weer 'n ander veld.

Die rol wat die psige op die liggaam speel, is baie belangrik, en die voorkoms van simptome wat later ontwikkel in patologiese komplekse is baie opvallend.⁴ Omgekeerd is die invloed van die uitwerking van liggaamlike prosesse op die psige net so belangrik. Siekte-beelde soos neurodermatitis, peptiese ulserasie en baie ander word soms beskou as die gevolg van die uitwerking van psigiese stoornisse op die soma. Behalwe hierdie voorbeelde is daar baie ander siekte-prosesse en siekte-beelde waarin die oorsprong van die patologiese proses in 'n stoornis van die hoë serebrale funksies gesoek kan word.

Die rol van emosionele stoornisse met die uitwerking daarvan op die kardiovaskulêre-stelsel of op die pilorus, die maagselvlies, die kolon, of op die fisiologiese sekresiemeganismes, is maar een uit baie fasette van die psigosomatiese medisyne. Ander faktore wat in hierdie verband 'n rol speel, is die invloed van wilsbesluite of wilsuitinge, en die invloed van psigiese ooraktiwiteit op die beheer van willekeurige en onwillekeurige spiere en op buislose en buishebbende klierre. Hierdie voorbeelde illustreer maar net gedeeltelik die onuitputlike veld op hierdie gebied.

'n Aantal sielkundige toetse vir emosionele angs en spanning, bv. die oorerflikheidstoets van Ayman,⁵ die koue pressortoets en die asemphoutoets van Hines,⁶ die I.P.A.T. toetse van Cattell⁷ en die gemodifiseerde vingerpletismografiese toetse met die Hellige Infracron vingerpletismograaf,⁸ wat deur Van der Merwe gestandaardiseer is, is onlangs in 'n studie⁹ gebruik om uit te vind of daar 'n verband is tussen angs en spanning (van verskillende grade) en kroonaartrombose, in gevalle waar die trombose bewys is. 'n Poging is ook aangewend om te probeer vasstel of angs en spanning in noemenswaardige graad voorkom by normale persone, hospitaalpasiente wat nie kroonaarlyers is nie, en Bantoe-pasiënte met essensieële hipertensie.

Die bewese kroonaartromboselyers toon 'n uitgesproke, onrusbarende, hoë angs- en spanningsyfer wat in alle toetse weerspieël word, in teenstelling met die normale graad van angs en spanning wat by gehospitaliseerde pasiënte voorkom wat nie kroonaarlyers is nie. Bantoe-pasiënte, selfs diegene met essensieële hipertensie, is minder onderhewig aan kroonaartrombose, en hulle het 'n normale syfer vir angs en spanning.

Emosionele angs en spanning, wanneer die gestandaardiseerde formule van Van der Merwe gebruik word, kan nou klinies maklik met die Hellige Infracron vingerpletismograaf gemeet word, en kan in die spreekkamers van geneeshere in 'n persentasie uitgedruk word. Dié persentasie kan dan met 'n gestandaardiseerde normale persentasie vergelyk word.

Hierdie metode van ondersoek is waardevol aangesien dit 'n belangrike hulpmiddel is om die graad van angs en spanning by pasiënte op 'n objektiewe manier vas te stel.

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THE RETINOPATHIES

A great deal of new knowledge has emerged on the retinopathies, particularly those associated with hypertension and diabetes, as a result of advances in techniques for preparing flat retinal sections and the advent of a simply operated retinal camera.

There is general agreement that 'diabetic' retinopathy is a disease distinct from 'hypertensive' retinopathy and is not caused by insulin administration. Its onset is related to the duration of the disease and is not prevented by strict control of the blood-sugar level. The retinal camera has demonstrated beyond doubt that haemorrhages and exudates come and go. Meyerson,¹ in a paper read at the 44th South African Medical Congress, suggests that this occurs cyclically, and proposes a new classification of the retinopathy that may have prognostic value. The natural history and prognosis for vision have not been fully worked out. Caird² has attempted to assess the rate of progression and regression of micro-aneurysms, haemorrhages and exudates, and suggests that the rate of regression over a five-year period is greater than was previously believed and, contrary to expectation, is high in diabetics under the age of 40 years.

Friedenwald³ has described the microscopic changes in diabetic retinopathy. They occur mainly on the venous side and are characterized by micro-aneurysms of the capillary walls occurring about zones of occluded capillaries. The diabetic type of micro-aneurysm occurs only within retinal tissue and is not confined to diabetes, but is found, for example, in malignant hypertension.

There is considerable controversy over the pathogenesis of micro-aneurysms. Cogan, Toussaint and Kuwabara⁴ have investigated this problem; they believe that micro-aneurysms begin at the sites of former mural cells, postulating that the loss of the mural cells provides a weak point in the capillary wall at which the outpouching or aneurysm occurs. Subsequently the aneurysms become hyalinized, undergo fatty degeneration, and finally disintegrate. Their paper is of exceptional interest and is accompanied by photomicrographs of diabetic retinæ unequalled for clarity and detail.

Cogan⁵ and his associates have also studied the extra-vascular lesions. These were found in approximately half the retinæ of 50 eyes removed from diabetics immediately after death. They consisted of PAS-positive microspheres (which were thought to have little pathological significance), hyaline deposits of the outer retinal layers, cytoïd bodies, phagocytic activity, lipids and pseudo-cysts. The hyaline deposits were correlated with the severity of the vessel changes and may have derived from serum, but the possibility that they may represent a hyaline degeneration of retinal tissue is considered. Cytoïd bodies were thought to result from ischaemic necrosis of the inner retinal layers owing to occlusive vascular disease, while the phagocytes were thought to be concerned with the disposal of fats, vessel-wall fragments, and haematogenous pigment. The amount of lipid was more than would have been expected from the liberation of masked fats, and it was suggested that it might be acquired by binding of blood-borne lipids with PAS-positive material. Pseudo-cysts were more frequently found in diabetic retinæ than

in normal eyes of the same age group; while not specific for diabetes they are probably related to occlusive vascular disease.

Finally, it was pointed out that neither these findings nor those of others indicate whether diabetic retinopathy results primarily from disease of the blood vessels or secondarily from metabolic disturbances in the retina. This remains an open field for further investigation.

The retinopathy of hypertension is classically divided into four grades of severity (Wagener and Keith).⁶ There is still considerable argument whether malignant hypertension is a separate disease.

Leishman⁷ has proposed a fresh approach to hypertensive retinopathy and points out that the degree of arteriosclerosis in the retinal vessels has not been sufficiently emphasized. He argues that the retinopathies in hypertension are due to a single pathological process, which is modified by the degree of vascular sclerosis present at the onset of hypertension, and this in turn dictates the presenting fundus picture. His classification of hypertensive retinopathy into seven groups is most useful as a clinical guide to the state of the retinal vessels and for general prognosis. Serial retinal photographs, reproduced in his papers, suggest that localized areas of arteriolar spasm may occur in hypertensive retinal vessels. Harry⁸ supported Leishman's views at the symposium dealing with hypertensive retinopathy at the 83rd Congress of the Ophthalmological Society of the United Kingdom. Fundus lesions were exactly located in the postmortem specimen. Serial sections were made from vessels that had been unduly narrowed in life; the majority showed diffuse hyperplastic sclerosis, but this appeared to be consequent upon pre-existing hypertonus.

At the same symposium McMichael⁹ demonstrated, with the aid of serial photographs, how soft exudates appeared and grew rapidly and might continue to appear for some days after the blood pressure had been lowered, their growth often seeming to be constrained by the adjacent vessels, which might even be pressed temporarily aside until the exudation started to regress. Later these soft exudates became granular, resembling hard exudates, which generally appeared at about this stage at sites unrelated either to the soft exudates or haemorrhages. Soft exudates and haemorrhages resolved in a few weeks, hard exudates took up to a year. Arterial narrowing rarely altered after hypertensive therapy, which suggested that this narrowing was anatomical rather than functional.

The work of Dollery¹⁰ is of great interest. He has developed a technique by which the retina is photographed at intervals of a few seconds after an intravenous injection of fluorescein. In the hypertensive patient clusters of micro-aneurysms could be seen developing and often also disappearing when the hypertension was treated, and fluorescein could be seen leaking from the retinal arterioles in the neighbourhood of exudates. It is our view that this technique will have wide applications for the study of blood flow and abnormalities of the blood vessels in vascular disease.

Ashton¹¹ described the pathology of 'cottonwool' spots in malignant hypertension and other diseases. Capillaries

within the oedematus focus were uninjectable, being obliterated by the tissue pressure, whereas the immediately adjacent capillaries were dilated and often showed microaneurysms. Hyaline and lipid changes, typical of 'fibrinoid necrosis' were commonly to be found in the terminal and pre-capillary arterioles supplying the affected retina; this appeared to be the cause of the 'cottonwool' spot in malignant hypertension. He examined cytooid bodies and concluded that they were the terminal bulbous swellings of ruptured axons corresponding to Cajal nodes.

The scope and tempo of investigation into the pathological and clinical problems posed by the retinopathies are increasing and this will undoubtedly make an impor-

tant contribution towards a proper understanding of vascular disease generally.

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