Suid-Afrikaanse Tydskrif vir Geneeskunde : South African Medical Journal

Kaapstad, 15 September 1962 Deel 36 No. 37 Volume 36 Cape Town, 15 September 1962

VAN DIE REDAKSIE : EDITORIAL

DIE ONTBERING VAN MOEDERSORG

Gedurende die laaste aantal jare het 'n hele aantal belangrike nuwe benaderings tot ou probleme in die pediatrie op die voorgrond getree. As illustrasie van wat ons bedoel, kan daar byvoorbeeld verwys word na die omvattende ondersoeke wat gedoen is, en die nuwe insigte wat ontstaan het, ten opsigte van die invloed van die ontbering van moedersorg op die algemene en geestesgesondheid van die kind.

Toe Bowlby se boek oor *Maternal Care and Mental Health*[1] in 1951 deur die Wêreld-gesondheidsorganisasie gepubliseer is, is dit van allerweë begroet as 'n uitstaande en ongeëwenaarde bydrae tot dié onderwerp. Die feit dat dit baie herdrukke, en ook vertalings in verskillende tale, beleef het, verleen ondersteuning aan die mening dat dit 'n belangrike bydrae was. Hierdie boek het dan ook daartoe gelei dat die begrip ‚ontbering van moedersorg' ingeslaan het, en op 'n praktiese vlak het dit 'n groot invloed gehad op die soort van behandeling wat kinders ontvang het in inrigtings, kleuterskole en hospitale dwarsoor die wêreld.

Gedurende die tien jaar wat verloop het sedert die publikasie van Bowlby se boek, is daar op groot skaal navorsing gedoen oor verskillende aspekte van die probleem van die betekenis en implikasie van moedersorg. Sommige van Bowlby se opvattings is sterk gekritiseer en soms ook verdraai, maar al die kritiek was nie net negatief nie. As gevolg van die stelling wat hy ingeneem het, en ook as gevolg van die negatiewe sowel as positiewe kritiek daarop, kan hierdie hele probleem vandag in 'n veel beter perspektief gesien word.

Dit is dan ook wat nou gebeur het met die verskyning van 'n nuwe bundel, *Deprivation of Maternal Care: a Reassessment of its Effects*,[2] wat so pas deur die Wêreldgesondheidsorganisasie gepubliseer is. Dié bundel bevat die bydraes van 'n hele aantal deskundiges en behoort deur elkeen gelees te word wat homself op die hoogte van sake wil hou van ontwikkelinge op hierdie gebied.

Bowlby se sentrale tema kan opgesom word deur te sê dat hy aangevoer het dat langdurige onderbrekings van die moeder-kind verhouding gedurende die eerste drie jaar 'n kenmerkende neerslag het op die kind se persoonlikheid. Sulke kinders is gewoonlik emosioneel geïnhibeerd en geïsoleerd. Hulle het nie die vermoë om warme en blywende menslike verhoudings met ander kinders of volwassenes te vorm nie, en behoudende vriendskapsbande ontbreek dus gewoonlik by hulle.

Hierdie soort insig het natuurlik nie by Bowlby die eerste ontstaan nie. Sulke skeppende skrywers soos Charlotte Brontë, byvoorbeeld, het in haar bekende roman *Jane Eyre*, wat alreeds in 1847 gepubliseer is, aangetoon dat sy bewus was van die algemeen-menslike implikasies van emosionele ontbering. En in die pediatriese literatuur het hierdie soort opvattings reeds al sistematies begin verskyn met die publikasie van Chapin[3] se beskrywing van ‚atrofiese' kinders wat oor lang tydperke in inrigtings moes bly.

Die besondere bydrae van Bowlby is egter daarin geleë dat sy werk net op die regte stadium gekom het — toe die sielkundige klimaat, wat onder andere geskep is deur die ontworteling van so 'n groot aantal kinders en volwassenes gedurende die vorige wêreldoorlog, net reg was om dié soort probleem te ondersoek. Die verbetering van omstandighede en fasiliteite vir die versorging van kinders in alle soorte inrigtings is dus 'n direkte uitvloeisel van sy werk.

Die nuwe navorsing wat deur die vroeër werk van Bowlby geïnspireer is, het vandag vir ons egter breër en omvattender insigte gebring. Niemand betwyfel nou meer die feit dat die ontbering van moedersorg, van kinders in inrigtings of hospitale vir korter of langer periodes, van groot belang is nie. Maar ons weet ook dat dit nie net kinders in inrigtings is wat blootgestel is aan die nadelige invloed van emosionele ontbering nie. Kinders ly as gevolg van die soort temperament en persoonlikheid wat hulle het en van die ongunstigheid van die atmosfeer en agtergrond waarin hulle opgroei. 'n Gebalanseerde benadering tot die probleem van die invloed van die ontbering van moedersorg moet dus alle omstandighede insluit wat 'n nadelige invloed op die ontwikkeling van die persoonlikheid van die kind kan hê. Dit, in breë trekke, is die perspektief wat die onlangse publikasie van die Wêreld-gesondheidsorganisasie op die probleem werp.

1. Bowlby, J. (1951): *Maternal Care and Mental Health*. Geneva (World Health Organization: Monograph Series, No. 2).
2. Various authors (1962): *Deprivation of Maternal Care: a Reassessment of its Effects*. Geneva (World Health Organization: Public Health Papers, No. 14).
3. Chaplin, H. D. (1908): Arch. Pediat., **25**, 491.

CONCERNING THE DIAGNOSIS OF PRIMARY HYPERPARATHYROIDISM

In some clinics hyperparathyroidism has been found to be present in up to 20% of patients with renal stones.[1] If this applies in South Africa there must be very many people whose kidneys are suffering from lack of proper diagnosis and treatment. In making a diagnosis of hyperparathyroidism by far the most important single datum is the level of the serum or plasma calcium. When this is unquestionably and repeatedly raised, the diagnosis is three-quarters made. Almost all that remains to be done is to exclude other causes of hypercalcaemia, such as sarcoidosis, myelomatosis, carcinomatosis and vitamin-D overdosage, and other more rarely implicated disorders, including the milk-alkali syndrome, beryllosis, hyperthyroidism, Cushing's syndrome, hypoadrenalism and

carcinoma-without-metastasis. Bone disease is also looked for, partly because the peri-operative management of hyperparathyroid patients with osteopathy presents special problems.

Dent and Harper[2] have recently performed a service in confirming that the osteitis fibrosa of hyperparathyroid bone disease occurs only in association with distinctly raised serum-alkaline-phosphatase levels. In 86 healthy adults they found a mean level of 5·6 (SD ± 1·87) King-Armstrong units among females, and 7·6 (SD ± 1·9) King-Armstrong units among males. Their series of 70 patients with primary hyperparathyroidism was divided into two distinct groups with regard to their alkaline-phosphatase levels. One group with normal, or slightly raised (less than 16 K-A units) levels included all those patients without the radiological bone changes of hyperparathyroidism. The other group, with raised levels (above 16 K-A units), included only those with osteitis fibrosa.

Unfortunately, in many patients with hyperparathyroidism the serum calcium is only slightly raised, or intermittently raised, or may remain within the upper limits of normal (within the upper 95 percentile or even 80 percentile). It may be that in some of these cases the measurement of the ultrafiltrable or even the ionized calcium fraction[3] is necessary to demonstrate with certainty the presence of an abnormality in calcium metabolism.

The measurement of the urinary calcium excretion is of little importance in the diagnosis of hyperparathyroidism. The simple Sulkowitch test, done on an early-morning specimen of urine, is extremely crude. Although better than nothing as a ward procedure, it should not be considered as a 'screening test', especially since many patients with hyperparathyroidism do not have a raised urinary calcium excretion even in the presence of hypercalcaemia. Furthermore, it is virtually impossible to define 'hypercalciuria' because of the very wide normal range. Probably anything over 250 mg. per day on a normal diet should be considered suspiciously high.

The serum-inorganic-phosphorus level is also often unhelpful. If it is consistently below 2·5 mg. per 100 ml., then hyperparathyroidism is strongly suggested. A serum-calcium level on the high side, together with a low serum-phosphorus level can also occur in Cushing's syndrome and in neoplastic disease. The high promise from tests of urinary phosphorus excretion with relation to serum levels has not been fulfilled. Certainly, most patients with hyperparathyroidism have a high renal phosphorus clearance, but attempts to elaborate this into an accurate test in difficult cases have been disappointing. Several indices have been suggested, including the phosphate clearance, phosphate excretion index, percentage tubular reabsorption of phosphate, phosphate/creatinine clearance ratio, and theoretical renal phosphorus threshold. The inconsistency of these tests is illustrated in a recent symposium[4] in which the first speaker recommended one index, stating that the others were unsatisfactory; the second speaker was strongly in favour of a different index; and the third speaker considered that all of them were disappointing. Even the more complicated measurement of the tubular maximum reabsorption of phosphorus has given quite inconsistent results.

Another fairly recently introduced test is based on the empirical observation that the serum-phosphorus level in a normal subject rises considerably (more than 2 mg. per 100 ml.) after intravenous infusion of 1 - 1·5 G. of calcium as gluconate. Most patients with hyperparathyroidism show a rise of less than 1·0 mg per 100 ml. Further, normal subjects show a fall in urinary phosphorus excretion on the day of the infusion, while hyperparathyroid patients may have no fall or even a rise. This test, however, may yield both false positive and false negative results.

Hyperparathyroid subjects have been reported to show other defects in renal tubular function,[5] including an inability to concentrate properly and an inability to excrete acid urine after loading with ammonium chloride. It is unlikely that these tests will be at all helpful, in view of their non-specific nature and the frequency with which they are likely to be abnormal in patients with renal damage secondary to stone formation. Furthermore, McGeown has found that most of her hyperparathyroid patients give normal results in these tests.[1]

In conclusion, one can only say that a patient in whom hyperparathyroidism is suspected and in whom the initial serum-calcium levels are in the suspicious range, must be observed for a long period of time, the serum-calcium estimation must be repeated very many times, and a battery of the subsidiary tests should also be done. For final interpretation it is also essential that the laboratory concerned should know precisely its own normal range of serum-calcium levels and the accuracy of individual determinations.

1. McGeown, M. G. (1961): Proc. Roy. Soc. Med., **54**, 642.
2. Dent, C. E. and Harper, C. M. (1962): Lancet, **1**, 559.
3. Rose, G. A. (1957): Clin. chim. Acta, **2**, 227.
4. Symposium (1961): Proc. Roy. Soc. Med., **54**, 639.
5. Fourman, P., Smith, J. W. G. and McConkey, B. (1960): Lancet, **1**, 619.