

### RUBELLA DURING PREGNANCY

It was in 1941 that Gregg<sup>1</sup> noticed a connection between congenital cataract and rubella in the mother during pregnancy. This phenomenon was observed after an epidemic of rubella in Australia, in which many affected women were more ill than is usual in this disease. Other congenital abnormalities which appeared similarly connected include heart deformities and deafness. It was soon appreciated that the danger period for maternal infection is during the first three months of pregnancy only.

The following important questions then arose: (1) What is the frequency with which deformities follow rubella, and (2) are other virus infections in the mother similarly implicated? The second question is more easily answered, in that there has been no good evidence that any other virus diseases produce malformation in the developing child.<sup>2</sup>

Regarding the frequency of malformations, Swan and his co-workers<sup>3</sup> in Australia considered the risk to approach 100% if the infection occurred within the first two months and to be about 50% if it occurred during the third month. These conclusions, and many others reported in the literature, were based on retrospective studies and were open to several fallacies. It was unfortunate, however, that widespread credence was accorded to them, so that some misguided doctors began teaching and practising therapeutic abortion in every woman who developed rubella early in pregnancy—sometimes even after the third month.

Well-planned prospective studies were clearly needed, and a number of small studies were reported, some of which have been summarized by Hill and his colleagues.<sup>4</sup> None of these were on a sufficiently large scale to give a really reliable idea of the true risk involved. In 1950 a bigger study was begun in Britain, planned by the Ministry of Health and the General Register Office, and carried out by the regional medical officers of health.<sup>5</sup>

The study lasted for two years. Two groups of women were selected—those who developed a virus infection during their pregnancy, and a control group whose birthdays were on the 31st of any month (a random 2% sample). The selected women were then observed until the end of the pregnancy. In the event of foetal loss the record card was completed and sent to the General Register Office. After a live birth the child was observed for two years, with medical examinations as soon as possible after birth, at one year, and at two years of age. After the third medical examination or on the death of the child before reaching two years of age, the completed record was sent to the General Register Office.

At the end of 1952, 1,745 cases of virus infection and 6,619 controls had been registered at the office, including 578 cases of rubella. The main focus of interest was centred on the cases of rubella. In 376 of these the rubella occurred later than the twelfth week of pregnancy, and in these the percentage of abortions, of stillbirths, and of deaths within the first two years of life were similar to those in the control group. The major malformation percentage was also similar (2·2% as against 2·3%).

In the 202 cases where rubella occurred during the first twelve weeks, the abortion rate, the stillbirth rate, and the death rate during the first two years were all approximately double the control rates. The percentage of children alive at the end of the two years was 83·6, as against 92·8% of controls. Of this 83·6%, some 13% had major malformations compared with 1·5% among the two-year-old control children. Thus it may be said that of a hundred women who had rubella during the first trimester, and whose children were live-born, eighty would have a child without important malformation living at the age of two years.

The high infant mortality could be accounted for by the association of rubella early in pregnancy with malformation and prematurity (by weight). For live-born children, the major malformation rate, according to month of onset of infection, was 15·6% up to the fourth week, 19·7% for the period from the fifth to the eighth week and 13·0% for the period from the ninth to the twelfth week.

Later examination of 237 of the 'rubella-children' at ages three - seven years showed that some cases of deafness and a few of mental defect had previously been undiagnosed. Nevertheless, it would certainly appear that we have been apt to overemphasize the dangers of maternal rubella. There is no longer any good reason for indiscriminate therapeutic abortion if rubella occurs at any stage of pregnancy. Plainly each case must be carefully considered on its merits, with the advantage that we now have knowledge of far more accurate percentage risks than have previously been available.

1. Gregg, N. M. (1941): Trans. Ophthal. Soc. Aust., 3, 35.
2. Leading Article (1960): Lancet, 2, 800.
3. Swan, C., Tostevin, A. L., Moore, B., Mayo, H. and Black, G. H. B. (1943): Med. J. Aust., 2, 201.
4. Hill, A. B., Doll, R., Galloway, T. McL. and Hughes, J. W. P. (1958): Brit. J. Prev. Soc. Med., 12, 1.
5. Rubella and other virus infections during pregnancy (1960): Rep. Publ. Hlth. Med. Subj., no. 101. London: H. M. Stationery Office.

### DIE JONG DOKTER EN DIE MEDIESE VERENIGING

Dit het dwarsoor die wêreld 'n gevinstige gebruik geword vir beroepslei om professionele organisasies te vorm waaraan hulle kan behoort en wat as middel kan dien om hulle materiële behoeftes te beskerm en ook om hul kulturele en wetenskaplike ideale te verwesenlik. In die

meeste lande van die Westelike wêreld het geneeshere bv. nasionale mediese verenigings gevorm, wat op hulle beurt weer lede is van die Wêreld Mediese Vereniging. So het ons ook in hierdie land die Mediese Vereniging van Suid-Afrika ,om die mediese en verwante wetenskappe

te bevorder en om die eer en die belang van die mediese professie te behartig.

Sedert die vroegste dae van sy bestaan was dit die uitgesproke doel van die Mediese Vereniging om op te tree as 'n wetenskaplike en kulturele liggaaam van professionele mense, wat ten volle bewus is van die groot en belangrike verantwoordelikheid wat op hulle rus om op die hoogte van sake te bly aangaande professionele, wetenskaplike, en kulturele sake.

Dit is wel waar dat die Vereniging gedurende die laaste aantal jare onderhewig was aan besondere ondersoek en kritiek. Daar moet egter in gedagte gehou word dat die Vereniging te staan gekom het voor besondere belangrike probleme, veral op die gebied van die ekonomiese organisasie van die mediese praktyk. Die Vereniging kan slegs voortgaan om hierdie probleme op 'n bevredigende vlak te hanteer as hy kan reken op die heelhartige ondersteuning, nie net van al sy lede nie, maar ook van elke individuele praktiserende geneesheer.

Die Mediese Vereniging en die voordele van lidmaatskap is baie goed bekend by 'n groot aantal geneeshere oral oor die land, maar daar is tog nog baie geneeshere wat nie bewus is van al hierdie voordele nie.

Verder, teen die tyd dat hierdie artikel verskyn, sal 'n groot aantal geneeshere wat onlangs gekwalifiseer het, toetree tot die gelede van die mediese praktisyne in die land. Dit is aan hierdie twee groepe geneeshere—diegene wat reeds al 'n geruime tyd geleden gekwalifiseer het, maar nog nie lede van die Vereniging is nie, en diegene wat onlangs gekwalifiseer het, dat ons 'n dringende uitnodiging wil rig om lede van die Vereniging te word.

Ons wil veral die aandag van al die geneeshere wat onlangs gekwalifiseer het, vestig op die uitstekende artikel: 'The Medical Association of South Africa: its rôle in the past and its ideals for the future', wat in die uitgawe van die *Tydskrif* van 21 Mei 1960 gepubliseer is (34, 423). Hierdie artikel is geskryf deur dr. J. H. Struthers, agetrede voorsitter van die Federale Raad, en dit handel oor die dienste wat die Vereniging lewer op die gebiede van die ekonomiese organisasie van die mediese praktyk, die druk van die *Tydskrif*, die rol van die Vereniging ten opsigte van die vooruitgang van mediese opvoeding in die wydste sin van die woord, internasionale affiliasie, en die Vereniging se hoop vir die toekoms.

Die volgende is 'n opsomming van die dienste wat deur die Vereniging gelewer word:

1. Geleenthede vir kolgas om mekaar te ontmoet, om wetenskaplike vergaderinge te hou, en om geleenthede om gedagtes te wissel daar te stel.
  2. 'n *Tydskrif* vir die verspreiding van mediese kennis.
  3. Fasiliteite om etiese verskille tussen lede te besleg.
  4. Fasiliteite om met mediese hulpverenigings te onderhandel en die daarstelling van 'n mate van kontrole oor mediese bystands fondse.
  5. Fasiliteite vir onderhandeling met die Ongevallekommissaris.
  6. Om die Vereniging te verteenwoordig in alle sake wat mediese praktisyne aangaan, en die feit dat die Vereniging erken word as die amptelike liggaaam in verskeie Wette en Ordonnansies.
  7. Regskundige beskerming vir individuele praktisyne.
  8. Die verky van verskeie soorte vergunnings insake inkomstebelasting.
  9. Die verky van verskeie soorte voorkeurversekering vir lede.
  10. Hulp vir lede deur die agentskapsafdeling.
  11. Geriewe vir lede wat in oorsese lande reis deur wederkerigheid met die Britse Mediese Vereniging en die Kanadese Mediese Vereniging, en deur lidmaatskap van die Wêreld Mediese Vereniging.
  12. Die verbetering van salarisskale vir voltydse personeel.
  13. Die invloed op mediese skole en mediese opvoeding in die algemeen, bv. ondersteuning van die stigting van die Kollege vir Interniste, Chirurge en Ginekoloë van Suid-Afrika.
  14. Nagraadse kursusse wat direk deur die mediese skole aangebied word.
  15. Biblioteek-fasiliteite deur toekenning aan die biblioteke van mediese skole.
  16. Hulp aan behoeftige afhanglikes van lede deur middel van die Liefdadigheidsfonds.
  17. Optrede as 'n saambindende faktor deur Takke en Afdelings.
  18. Skakeling met ander professionele liggame en die publiek.
- Die Vereniging kan slegs daarin slaag om 'n bevredigende en waardige rol te speel in die mediese professionele beroepslewe in ons land as hy kan reken op die heelhartige ondersteuning van al die geneeshere in die land.