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EDITORIAL : VAN DIE REDAKSIE

TRACHOMA

Trachoma has plagued Man since time immemorial. It remains one of the most prevalent infections and one of the most important causes of defective vision and actual blindness, particularly in the underdeveloped tropical and subtropical areas of the world.

A determined effort is now being made under the auspices of the World Health Organization to define the distribution, incidence and importance of trachoma and allied infections in causing eye disease, and to assess methods for their treatment and control.

Recent studies have shown that trachoma and inclusion conjunctivitis have many features in common and indeed cases are often difficult, sometimes impossible, to differentiate one from the other. Both are due to organisms known as TRIC agents, a named derived from (tr)achoma-(i)nclusion (c)onjunctivitis. So far it has not been possible to distinguish in laboratory tests between the agents isolated from cases of trachoma, and those of inclusion conjunctivitis. They are members of the psittacosis-lymphogranuloma group of organisms. Although often regarded so, they are not true viruses but form a link between viruses and the rickettsiae. In their chemical, physical and biological properties they are more closely related to rickettsiae than to viruses. They are obligate intracellular parasites, and form characteristic cytoplasmic inclusion bodies which in their fully-developed form consist of a mass of elementary bodies, staining slightly basophilic with Giemsa stain. They appear to have first been cultured in the yolk sac of the chick embryo in Chile by Machiavello in 1944, but this work was not confirmed until 1955 when T'ang, in China, showed that the agent grows readily in the yolk sac of chick embryo and that contaminating bacterial growth could be suppressed by the addition of relatively large amounts of streptomycin in the inoculum. His work was soon confirmed in Britain, South Africa and in North America. The application of this technique to its study has resulted in a great expansion of our knowledge of these infections. These recent advances are of particular interest to those concerned with blindness and eye diseases in South Africa.

The occurrence of trachoma in South Africa has been known for many years. Among those who first noticed its ravages, was David Livingstone, who over a hundred years ago mentioned in his diary that every year there was an epidemic of conjunctivitis in the period before the rains.

However, the extent of the disease in this region was not appreciated until surveys, many of them undertaken by ophthalmologists on behalf of the Bureau for the Prevention of Blindness of the South African Council for the Blind, have shown that this infection was widespread in South Africa and was particularly severe among the indigenous people of the Northern and North-Western Transvaal. In these areas, trachoma is the most important and most frequent cause of blindness.

Laboratory studies were begun in 1948 at the South African Institute for Medical Research, and later extended in collaboration with the Bureau for the Prevention of Blindness, to define the incidence and importance of trachoma and allied infections in this region. They have shown that this infection is more prevalent and widespread than had previously been suspected. The high incidence in the Northern Transvaal has been confirmed by virus isolation, and the disagreement on clinical grounds, as to the part contributed by trachoma to the over-all picture of eye diseases has been resolved. Somewhat unexpectedly it has been found that a high proportion of infants and children in crèches and nursery schools in the Bantu townships of Johannesburg are also infected with the TRIC agent. This finding is surprising, as trachoma in its classic recognized form is rare in individuals who have been born and reared in these townships. Even more surprising has been the finding that a significant proportion of children in White schools and many White patients with conjunctivitis, seen in private practice in Johannesburg, Durban and presumably in other centres too, have this infection. However, few of these patients present with the classic signs of trachoma. Most have complained only of a long continuing, but mild irritation and of a sandy feeling in the eyes especially on awakening in the morning, often associated with a slight discharge and crusting of the eyelashes. On examination, their eyes have shown varying stages of inflammation, from injection of the conjunctival vessels to follicular conjunctivitis and sometimes scarring of the conjunctiva of the upper tarsus. Relatively few have shown early pannus, thickening of the eyelids, entropion and ectropion. Perhaps a classic example of this type of case was recently described by Lord Moran in his medical biography of Sir Winston Churchill who could have contracted this infection during his military career in India, the Sudan or possibly even in South Africa.

When these findings were first reported, doubts about their validity were expressed. However, their accuracy has been fully vindicated by recent investigations in Australia, the USA and elsewhere.

Infection with the TRIC agent has thus been shown to be one of the commonest causes of conjunctivitis in primitive communities in South Africa and to be not uncommon in the more advanced population in the urban areas. It may therefore be timely for those concerned to review the diagnosis and possibly the treatment of their patients with conjunctival inflammation. It may be especially worth while in those patients who for many years have complained of irritating and injected eyes.

The diagnosis may be established by finding the characteristic inclusion bodies in conjunctival smears stained with Giemsa, or by the fluorescent antibody technique. However, under South African conditions the best results have been obtained by the actual isolation and identification of the agent in yolk-sac culture.

Facilities to undertake this work have been provided by the South African Institute for Medical Research, the State Health Department's laboratories in Cape Town and the Microbiology Department of the Durban Medical School.

Fortunately, especially in its early stages, the disease responds well to broad-spectrum antibiotic ointment, but the course of treatment may have to be prolonged, particularly in long-standing infections. The results of mass treatment campaigns to eliminate this infection have been disappointing, probably because re-infection from family and other close contacts is likely to occur in most individuals living in the affected areas. The value of a vaccine developed by the South African Institute for Medical Research is under study.

Perhaps it should be emphasized that the disease in its severe form tends to disappear as standards of living and cleanliness are raised. This of course is the aim of the public health and other authorities. Its achievement may result in the elimination of the serious forms of this eye disease, but will take a long time and until it is possible, reliance must be placed on the treatment of those affected.

It is clear that at present, trachoma and its allied infections constitute one of the outstanding health hazards in this region and is in urgent need of the attention of those concerned with the welfare of the community. The Bureau for the Prevention of Blindness of the South African Council for the Blind and the South African Institute for Medical Research are to be commended for calling attention to the extent of this problem. Their work merits full and continuing support and encouragement.

PROBLEME WAT DEUR GEWELD EN AANRANDING GESKEP WORD

Almal wat te doen het met die hantering en behandeling van pasiënte in die ongevalle-afdelings van ons hospitale, weet hoe groot die probleem van aanrandingsgevalle is. Mense wat geslaan, geskop, met harde voorwerpe gekap of met messe of ander skerp instrumente gesteek is, moet die Staat alleen jaarliks miljoene rande kos. En om 'n idee te kry van die omvang en van die nodelose ellende wat deur dié toestand geskep word, is dit maar net nodig om die buitepasiënte-afdeling van enigeen van ons groot hospitale op enige plek in die land op 'n Saterdagaand te besoek.

Betroubare syfers oor die werklike aantal aanrandings is moeilik te bekom, omdat in die meeste hospitale nie aparte rekord gehou word van aanrandingsgevalle nie. Almal wat noodhulp nodig het in die ongevalle-afdeling, word saam gegroepeer. Daar is egter baie duisende sulke gevalle jaarliks in die Republiek—by sommige hospitale tot 40% of meer van die totale aantal ongevalle.

Afgesien van die besering en verminking van die betrokke slagoffers self, en die gevolglike ontberings van hulle verwante, beteken die mannekrag aan opgeleide personeel wat nodig is om dié probleem te hanteer, dat baie ander noodsaaklike gesondheidsdienste skade ly. En as ons verwys na mannekrag, bedoel ons nie net geneeshere nie—ons verwys ook na die groot aantal verpleegsters, maatskaplike werkers, polisie en hofpersoneel wat onvermydelik betrokke is by die meeste van hierdie soort gevalle.

Ook wat die onkoste betref, staan ons voor 'n soortgelyke probleemgesteldheid. Weer is dit onmoontlik om presies te bereken wat aanrandingsgevalle die land jaarliks kos. Daar is net nie daardie soort boekhoustelsel nie, afgesien van die feit dat sulke gevalle dikwels in verskillende afgeslote kompartemente behandel en gehanteer word, soos byvoorbeeld in hospitale of herstelinrigtings of verbeteringsgestigte of tronke, ens. Om egter enigsins 'n idee van die geldelike implikasies te vorm, kan ons bereken wat die versorging alleen van *een* aanrandingsgeval kos as ons in ag neem dat 'n persoon wat verlam is as gevolg van 'n messteek in die rugmurg sy lewe lank in 'n hospitaal versorg moet word teen enigiets van R5 - R10 per dag, terwyl sy aanrander nog in die tronk gehou moet word teen ongeveer R4 or R5 per dag. As ons hierdie syfers dus vermenigvuldig met die honderdduisende aanrandingsgevalle wat daar elke jaar is, sal dit duidelik wees hoe groot hierdie probleem is.

As medici strek ons belangstelling in hierdie saak onvermydelik tot die probleme van voorkoming en behandeling. Voorkoming van 'n probleemtoestand soos hierdie, is nie so maklik nie. Buitendien moet ons dan ook nog vir ons rekenskap gee van die vraag na veroorsaking. Dit is in sigself moeilik en gekompliseerd, en soos dit die geval is met baie ander sosiale verskynsels, is die veroorsaking meervoudig. Behalwe waar die aangerande persoon homself beseer deur hom te verdedig, is aanranding met die gevolglike ontstaan van ernstige letsels, 'n verskynsel wat by Blank en nie-Blank gewoonlik op die laer vlakke voorkom. Daarby speel faktore soos agtergrond, leefwyse, ledigheid en werkskuheid, sowel as drankmisbruik, ens. elk 'n groot rol.

Wat die oorsaak van die aanrandingsepidemie ook al mag wees, een ding is seker en dit is dat alles in die werk gestel moet word om die beskawingstatus van alle mense te probeer verbeter. Hoe meer opvoeding en geleentheid vir vrugbare uitlewing, hoe minder aanrandings sal daar wees—glo ons. Maar dis 'n reuse-taak met 'n langtermynimplikasie. Nogtans moet op alle vlakke daaraan aandag gegee word.

Wat die aanrander self betref, moet daar uitgebreide korrektiewe dienste wees vir die sogenaamde eerste oortreder om te voorkom dat hy in 'n gewoonte-aanrander ontwikkel. En vir gewoonte-aanranders moet daar nie te veel genade wees nie. Lang periodes van afsondering uit die gemeenskap wat herhaling van die aanrandingsdade sal ontmoedig of voorkom, moet ingestel word.

Daar is dwarsoor die wêreld die eienaardige neiging om emosioneel betrokke te raak by die aanrander deur sy optrede te probeer vergoelik, ten koste van die aangerandene, wat die lydende party is. Wat ons voorstel, is nie net 'n harde, vergeldende benadering nie, maar veel eerder 'n uitgangspunt wat bereken is om 'n realiteitsperspektief te ontwikkel sodat ons wel met meegevoel kan optree, as dit nodig is, maar ook ontmoedigend en voorkomend, as dit nodig is.

Dat miskenning en sosiale ongeregtheid soms 'n rol speel, sal niemand ontken nie. Maar dis 'n kinderlike oorvereenvoudiging van die probleem om alle afwykende sosiale gedrag aan dié faktore toe te skryf. Daar is nog altyd die sosiopatiese en psigopatiese neigings in sommige mense wat hoogty sal vier in alle soorte gemeenskappe en onder alle omstandighede. Die menslikheid van ons optrede moet dus met fermheid aangevul word, anders kan ons maklik in omstandighede beland waar die reguit-pad lopers die prooi word van die onbeheersde uitinge van mense wat geen perk ken in hul onverantwoordelikheid teenoor hulle medegenote nie.