

VAN DIE REDAKSIE : EDITORIAL
NEUS-DRAERS VAN STAFILOKOKKE

Stollings-positiewe stafilokokke is 'n dreigende gevaar in hospitale. Alhoewel die piogene *Staphylococcus aureus* reeds in 1881 ontdek is, is dit eers 55 jaar later besef dat dit ook by normale, gesonde mense kan voorkom. Vóór 1937 was geen aandag geskenk aan gesonde draers van stafilokokke nie (weens die gebrek aan 'n geskikte onderskeidingsmetode tussen patogene en apatogene organismes). Alhoewel die kwessie van draers, met meegaande implikasies, reeds sedert 1906 ten opsigte van difterie bekend is, sedert 1910 ten opsigte van *Salmonella typhi* en sedert die einde van die eerste Wêreldoorlog ten opsigte van meningokokke, kom die probleem in verband met stafilokokke-draers eers met die aanvang van moderne hospitaalwese, en die sulfonamied-resistensie, in gedrang.

Sedert 1903 was daar reeds 'n metode om 'n patogene stafilokok van die groot hoeveelheid apatogene kokke te onderskei—naamlik deur middel van die koagulase-toets soos deur Loew beskrywe. Hierdie praktiese en waardevolle toets is egter eers in 1934 deur Chapman in die V.S.A. in gebruik geneem, en nog later in 1937 deur Cruickshank in Brittanje. Dit is weereens 'n aanduiding van die dominerende (in hierdie geval verdragende) invloed wat die patologie op mikrobiologiese vakke in Engelssprekende lande uitoefen.

Sedert 1937, tot selfs vandag toe, vind ons dan 'n aanhoudende stroom van publikasies aangaande stafilokokke-draers wat die probleme met betrekking tot hospitaalwese voortdurend op die voorgrond stel.

Daar is tot nuwe insigte gekom aangaande die voorkoms van stafilokokke-draers met betrekking tot die verskillende liggaamsorgane. So bestaan daar vandag geen twyfel meer nie dat die neus hoofsaaklik in dié verband aangetas word. Die rede hiervoor mag aan die anatomiese struktuur van die neusslymvlies toegeskryf word. Apokriene sweetkliere word slegs aangetref in die epiteel van die neus; die vel van die perineum en okselholte. Histologies bestaan daar 'n ryk klier-struktuur waarin stafilokokke onverhinderd kan vermeerder. Hierdie kliergange dien nie alleen as skuilplek vir die stafilokokke nie, maar bied ook beskerming aan teen die invloed van antibiotika en ontsmettingsmiddels. Andersins bestaan daar 'n groot verskil ten opsigte van die struktuur van die fossa nasalis en die vestibulum wat met slymafskeidende epiteel beklee is. Teenswoordig is daar egter nog niks definitief insake die skuilplekke en vermeerdering van stafilokokke in die neus bekend nie.

Volgens literatuurstudies wissel die aantal stafilokokke-draers by verskillende nasies.

Die meegaande tabel is opgestel na aanleiding van 106 publikasies uit alle dele van die wêreld.

Soos die tabel aandui, bestaan daar 'n aansienlike persentasie-verskil met betrekking tot neus-draers van stafilokokke by gesonde volwasse persone in die Middellandse-seegebied (Griekeland, Italië), Wes-Afrika (inboorlinge),

NEUS-DRAERS VAN STAFILOKOKKE

Persentasie	By gesonde volwassenes	By hospitaal-toelating	Ná 2 weke hospitalisasie	By verpleegsters
0 - 10	Griekeland/ V.S.A.*			
11 - 20	Italië/binne-land van Wes Nieu-Guinea (inboorlinge)			
21 - 30	Borneo/ Wes-Afrika	Nieu-Seeland		Kanada
31 - 40	Engeland (Britse leër)	Engeland		
41 - 50	Britse lugmag Australië	Engeland/ V.S.A.	V.S.A.	V.S.A.
51 - 60	Lapland (inboorlinge)		Engeland	Engeland/ Skandinawië
61 - 70			V.S.A.	Engeland

* Slegs kleurling-voedselhandelaars.

Engeland en die V.S.A. Engeland en die V.S.A. toon die hoogste persentasie (tussen 30 - 50%). In die tropiese gebiede van Wes-Afrika en Borneo is die aantal draers minder, en die laagste persentasie kom in die Middellandse-seegebied voor.

Dit blyk dat, afgesien van klimaatsomstandighede, daar ook nog 'n rasseverskil bestaan—byvoorbeeld onder nie-Blanke voedselhandelaars in die V.S.A. word baie minder stafilokokke-draers aangetref as by die blanke bevolking aldaar. So is daar ook minder draers onder die inboorlinge van die binneland van Wes-Nieu-Guinea, Borneo en Wes-Afrika as byvoorbeeld by gesonde lede van die Britse leër, en veral die Lugmag.

Dit is vanselfsprekend moeilik en wetenskaplik nie absoluut korrek om bogenoemde 106 verskillende publikasies op dié wyse te vergelyk nie, aangesien daar wel tegniese verskille sou bestaan tussen die verskeie bakteriologiese ondersoekmetodes. Die persentasies kan tot 'n mate fleksies wees van die betrokke ondersoekmetodes. Maar dit is tog duidelik dat stafilokokke-draerdom veral 'n probleem van hoogstaande beskawings is. Aan die anderkant het Lourell en Mellbin (1961) gevind dat 50-60% van die gesonde kinders van afgeleë nedersettings in Lapland draers van stafilokokke is.

Geen twyfel bestaan oor die belangrikheid van hospitale as stafilokokke-broeiplekke nie. Hier word die stof van die beddegoed—wat met kieme vermeng is—van pasiënte, verpleegsters en geneeshere gelyktydig ingesam. Geen wonder nie dat hospitaalpersoneel 'n hoë persentasie van stafilokokke-draers, veral in die neus, toon.

Die stafilokokkale besmetting van suigeling begin ook in die hospitale. Simpson beskrywe in 1960 dat 60% van alle babas wat in 'n Engelse hospitaal gebore is, reeds op die vierde lewensdag neus-draers van stafilokokke was en

op 'n tien-daagse ouderdom was daar reeds 80% besmet. Gedurende die eerste lewensjaar verloor hierdie kinders die stafilocokke weer, sodat die persentasie op 'n een- tot tweejarige ouderdom slegs 20% bedra. Daarna styg die syfers stadig en bereik dit die volwasse-vlak op vyfjarige ouderdom. Die penisillien-weerstandige stafilocokke ver-

dwyn stadig uit die neus van kinders wat in hospitale gebore is en word deur ander algemeen gevoelige stafilocokke vervang.

Elke geneesheer moet onthou dat ook gesonde stafilocokke-draers skade kan veroorsaak. Dit word dringend aanbeveel dat draers in hospitale dopgehou word.

THE PREVENTION OF ROAD TRAFFIC ACCIDENTS

The increasing number of road accidents and the increasing severity of the individual injuries sustained in these accidents are at last beginning to receive some of the attention they have long deserved. A publication of the World Health Organization on this subject¹ has been summarized in this *Journal* recently,² so that the whole matter has been well documented, and the facts and figures are available to any who may be interested.

How far is the medical profession committed to help in stemming the tide of this frightful state of affairs? If a relatively small epidemic disease were to break out in our country and cause the death of 3,500-4,000 people annually, and permanently cripple at least ten times as many, the whole country would be in an uproar and the call to the profession to do something would be clear and unmistakable. This, in fact, is the toll of the road traffic accident epidemic in this country. Must we wait? Can we not, unasked, offer to do something about the prevention of accidents?

There are several ways in which members of the medical profession, either through the official channel of the Medical Association or as individual doctors, can help. It has been stated categorically that 'a number of common medical conditions may have a causal relation to road traffic accidents, though they are responsible for only a small portion of the total of such accidents'.³ Nevertheless, a start can be made by pressing for a medical examination at regular intervals, particularly for drivers over the age of 50. Especially clear is the injunction that 'it is the duty of the doctor when prescribing a drug which may be dangerous to a driver, to inform his patient of the possible dangers of driving after taking it'.³ This should be remembered.

But the two greatest causes of accidents on the roads are speed and alcohol. While the imposition and control of the speed limits are the responsibility of the govern-

ment and the local authorities, and seeing to it that they are obeyed is the duty of the police, it should be made known to a wider group of people how dangerous alcohol is to the safety of the driver and of all road users. The danger of alcohol for the driver is now very well known, and tests for alcoholism are part of the routine examination of drivers involved in an accident and suspected of being under the influence of liquor. What is not so well known, and what should be made known to the public at large, is that pedestrians who have been involved in accidents are far more liable to be injured if they have previously consumed alcohol, and that no less than 43% of fatally injured pedestrians were found on autopsy to have a high blood-alcohol level.²

Twenty-five to thirty per cent of road accidents are associated with the consumption of alcohol and would probably not have occurred if road users had not been drinking. 'There can be no doubt that if no motor vehicle drivers ever drove when their blood-alcohol levels were 50 mg. per 100 ml. or more, there would be a reduction in accidents',³ and legislation to this end might therefore be an effective accident-preventive measure.

Where do we start? It would seem that our profession should approach the authorities to legislate that blood-alcohol tests be made obligatory on all drivers involved in accidents who are suspected of being drunk. A finding of a stated blood-alcohol level should make the driver liable to proper penalties—it would seem that a simple fine is not enough, confiscation of the vehicle or removal of the right to drive for a certain period seem to be more reasonable penalties to impose. There might then well be a reduction in the alcohol intake of our driving population and this might be reflected in a lower number of road traffic accidents.

1. Norman, L. G. (1962): *Road Traffic Accidents*, Public Health Paper No. 12, Geneva: WHO.
2. Abstract (1962): *S. Afr. Med. J.*, 36, 1096.
3. McCarroll, James T., et al. (1962): *J. Amer. Med. Assoc.*, 180, 127.