

# South African Medical Journal

## Suid-Afrikaanse Tydskrif vir Geneeskunde

### EDITORIAL

#### TOBACCO ADDICTION

Diseases of the great and the pathology from which they suffer have ever been a source of interest to medical historians and to the public generally. MacLaurin<sup>1</sup> in his well-known book published a series of articles in which diagnosis of the diseases which afflicted some famous historical figures was reviewed. This year interest has been aroused by a reference in Johnston's book on tobacco smoking<sup>2</sup> to the illnesses suffered by King George VI, and the king's early death. The author records that the late king suffered from chronic indigestion for many years, and that after an appendicectomy performed on him when he was a naval cadet by Mr. (later Sir Crisp) English, the same surgeon performed a gastro enterostomy when he was in his twenties, presumably for persistence of the symptoms. In his early fifties, the king, who had by then contracted Buerger's disease, was submitted to a lumbar sympathectomy by Professor (later Sir James) Learmonth and subsequently a chronic cough led to the discovery of a bronchial cancer. It was while convalescing from his pneumonectomy performed by Mr. (later Sir Clement) Price Thomas for this last disease, that a coronary thrombosis occurred and led to the king's death.

It is well known that King George was a heavy cigarette smoker, and the list of the diseases from which he suffered reads like a catalogue of diseases due to tobacco. Although the issue is one which many would like to avoid, the fact remains, as the Medical Research Council<sup>3</sup> reports, that 'the evidence for an association between lung cancer and tobacco smoking has been steadily mounting throughout the past 8 years, and . . . the most critical examination has failed to invalidate the main conclusions drawn from it'.

Cancer of the lung, however, is only one of the diseases in the list of conditions to which smokers are more prone than non-smokers, and that cigarette smoking has a deleterious effect on the human body cannot be questioned. Commonly the smoker who gives up smoking gains weight and this weight is again lost if he resumes the discarded habit. The smoker's lower weight is due to the toxic effects of the smoking on his metabolism; a small dose of poison is still poisonous, and it must be accepted that chronic poisoning of any nature is deleterious. How far can addiction safely go? It seems collectively that the price we pay for tobacco addiction is a heavy one.

When so large a proportion of the community is com-

### VAN DIE REDAKSIE

#### VERSLAWING AAN TABAK

Die siektes van beroemde mense en die patologie waaraan hulle ly, was nog altyd 'n bron van belangstelling vir mediese geskiedskrywers en vir die publiek in die algemeen. In sy bekende boek het MacLaurin<sup>1</sup> 'n reeks artikels gepubliseer waarin die diagnose van die siektes van sommige beroemde historiese mense bespreek word. Vanjaar is die belangstelling gaande gemaak deur 'n verwysing in Johnston se boek oor tabakrook<sup>2</sup> na die siektes van koning George VI en na die koning se vroegtydige dood. Die skrywer meld dat die wyle koning jare lank aan kroniese swak spysvertering gely het en dat, na 'n blindederms-operasie deur dr. (later Sir Crisp) English terwyl die koning nog 'n vlootkadet was, dieselfde chirurg later toe die koning in sy twintigerjare was 'n maagderminmonding gedoen het, waarskynlik omdat die simptome nog aangehou het. In sy vroeë vyftigerjare het die koning, wat toe reeds Buerger se siekte opgedoen het, 'n lende-simpatektomie deur professor (later Sir James) Learmonth ondergaan, en daarna het 'n kroniese hoes gelei tot die ontdekking van kanker in die lugpyp. Dit was terwyl die koning aan die herstel was van 'n longoperasie deur dr. (later Sir Clement) Price Thomas vir laasgenoemde siekte, dat 'n kroonslagartrombose ontwikkel het en die dood gevolg het.

Dit is goed bekend dat die wyle koning 'n kwaai sigaret-roker was, en die lys van sy siektes klink na 'n kataloog van die kwale wat tabakrook kan meebring. Hoewel baie mense liever hierdie saak wil ontduik, is dit nogtans 'n voldonge feit, soos die Mediese Navorsingraad<sup>3</sup> rapporteer, dat 'die inligting wat dui op 'n verband tussen longkanker en tabakrook oor die laaste 8 jaar steeds vermeerder het, en . . . die mees kritiese ondersoek het nog nie daarin geslaag om die vernaamste afleidings wat daaruit gemaak is te weerspreek nie'.

Longkanker is maar slegs één van die siektes waartoe rokers meer geneig is as nie-rokers, en dit is onweerlegbaar dat die rook van sigarette 'n nadelige invloed op die menslike gestel het. Gewoonlik word rokers wat daarmee ophou vetter, en gewoonlik word hulle weer maerder as hulle weer met die gewoonte begin. Die roker se verminderde gewig is te wylte aan die vergiftende uitwerking van die rokerij op sy metabolisme; selfs 'n klein dosis van 'n gifstof is nog altyd giftig, en die feit bly staan dat kroniese vergiftiging van watter aard ook al nadelig is. Alles in ag genome, is dit 'n duur prys om te betaal vir verslawing aan tabak.

Dit is glad nie verbasend dat die slotsom van die Navorsingraad, en ander gesaghebbendes in baie lande, nie algemeen

mitted to smoking, when young men (and even young women) so commonly think that they must take up smoking or their adulthood and their social sophistication or adequacy will be in question, and when the economic implications are so vast, it is not surprising that the conclusions of the Medical Research Council<sup>3</sup> and other authorities in many countries are not universally accepted. Apart from these special circumstances, few medical discoveries pass unresisted into immediate acceptance. The evidence against cigarette smoking, strong as it is, is statistical in nature. As the Medical Research Council says, 'It is clearly impossible to add to the evidence by means of an experiment on man'.<sup>3</sup> 'In scientific work, as in the practical affairs of everyday life, conclusions have to be founded on the most reasonable and probable explanation of the observed facts, and so far no adequate explanation for the large increase in the incidence of lung cancer has been advanced, save that cigarette smoking is indeed the principal factor in the causation of the disease. The epidemiological evidence is now extensive and very detailed'.<sup>3</sup>

There is much literature on the subject available to medical readers. They should all be familiar at least with the Medical Research Council's Report<sup>3</sup>—so indeed should every intelligent reader. Our patients are entitled to have presented to them the conclusions that are drawn from medical knowledge; it is not enough to put the facts before the public and to tell them to draw their own conclusions. By virtue of his scientific education and his training and experience, the doctor's conclusions are of more value than those of an ordinary layman. When that lay person's relative ignorance is combined with addiction, it is obvious that an unbiased conclusion will not easily be reached. While adults are free to do as they wish to please themselves to their heart's content within the limits of the law, adolescents are entitled to protection, and it is the duty of medical practitioners to give advice in accordance with their knowledge and convictions. To do otherwise indicates lack of a sense of responsibility.

1. MacLaurin, A. C. (1930): *Post Mortem*. London: Cape.
2. Johnston, L. (1957): *The disease of Tobacco Smoking and its Cure*. London: Christopher Johnson.
3. British Medical Research Council (1957): *S. Afr. Med. J.*, **31**, 783.

aangeneem word nie—'n groot deel van die bevolking is vaste rokers; jong mans (en selfs jong meisies) dink dat hulle moet rook of anders word hul volwassenheid en hulle sosiale sofistikasie of volwaardigheid in twyfel getrek; en bowendien is daar sulke enorme ekonomiese implikasies. Afgesien van hierdie spesiale omstandighede, word maar min mediese ontdekkings sonder weerstand algemeen aangeneem. Die feite teen sigarette-rook, hoewel ongetwyfeld kragtig, is statisties van aard. Die Mediese Navorsingraad meld tevens dat 'dit natuurlik onmoontlik is om die feite aan te vul by wyse van eksperimente op mense'. 'In die wetenskap, net soos by die praktiese aangeleenthede van die alledaagse lewe, moet ons ons afleidings baseer op die redelikste en waarskynlikste vertolking van die waargenome feite, en tot dusver was daar nog geen ander verduideliking van die groot vermeerdering in die voorkoms van longkanker nie; die rook van sigarette is ongetwyfeld die vernaamste faktor by die oorsaak van die siekte. Die epidemiologiese bewyse hiervan is vandag uitgebreid en breedvoerig'.

Daar is baie literatuur beskikbaar vir mediese lesers in verband met hierdie onderwerp. Alle geneeshere behoort ten minste met die verslag van die Mediese Navorsingraad bekend te wees—en dit geld ook vir elke intelligente (leke) leser. Ons pasiënte is daarop geregtig dat ons die gevolgtrekkings gebaseer op mediese kennis aan hulle voorlê; dit is nie genoeg om die feite bloot voor die publiek te stel en hulle aan te sê om maar self te oordeel nie. Omrede sy wetenskaplike onderrig, sy opleiding en sy ondervinding, is die dokter se gevolgtrekkings van groter waarde as dié van 'n gewone leek. En as daardie leek se betreklike onwetendheid nog bowendien met verslawing gepaard gaan, is dit baie duidelik dat hy nie maklik 'n onbevooroordeelde slotsom sal bereik nie. Volwassenes is nou wel vry om te maak wat hulle wil binne die perke van die wet, maar adolessente is geregtig op beskerming, en dit is die plig van geneeshere om voorligting te gee in ooreenstemming met hulle kennis en oortuigings. Om hierdie plig te versaak, beteken dat dit hom ontbreek aan 'n sin vir verantwoordelikheid.

1. MacLaurin, A. C. (1930): *Post Mortem*. Londen: Cape.
2. Johnston, L. (1957): *The disease of Tobacco Smoking and its Cure*. Londen: Christopher Johnson.
3. British Medical Research Council (1957): *S. Afr. T. Geneesk.*, **31**, 783.

#### CAVERNOUS TRANSFORMATION OF THE PORTAL VEIN

With the development of techniques for porto-systemic venous anastomoses in the treatment of portal hypertension, precise diagnosis of the site of the obstruction to the flow of blood becomes important. A most useful method of ascertaining this is percutaneous trans-splenic portal venography,<sup>1</sup> in which contrast medium is injected directly into the splenic pulp (Sherlock<sup>2</sup> recommends measurement of the intrasplenic pressure before injection, as a valuable gauge of the degree of portal hypertension). Serial radiographs show whether the flow of the dye through the splenic and portal veins is impeded, and demonstrate any diversion into collateral circuits e.g. gastro-oesophageal varices. The surgeon will learn which veins are available for anastomosis, and will be able to plan his approach accordingly.

Cavernous transformation of the portal vein is an interest-

ing cause of extra-hepatic portal hypertension. As Somers<sup>4</sup> points out, this term is to be preferred to 'cavernomatous transformation' as the condition is neither a hamartoma nor a true neoplasm. Venography demonstrates its nature well, showing a leash of tortuous dye-filled radicles replacing the splenic and portal veins. It is thought to follow portal vein thrombosis in early life, the most common cause of which is umbilical sepsis.

These cases probably make up a high proportion of what was formerly diagnosed as a 'Banti's syndrome' of childhood and adolescence. They present with signs of portal hypertension, the most lethal complication of which is rupture of gastro-oesophageal varices. Somers' case was first seen at the age of 7½ years, when splenomegaly was discovered; she was subsequently found to have mild anaemia, leukopaenia

and thrombocytopaenia, attributable to hypersplenism. Venography showed the typical appearances of cavernous transformation of the portal vein, but fortunately there were no oesophageal varices. (If it becomes necessary, splenectomy could be performed for the manifestations of hypersplenism). At the age of 17 days she had been admitted to hospital and had received penicillin injections for 'cellulitis . . . arising from sepsis of the umbilicus.'

The principal threat to life arises from ruptured gastro-oesophageal varices; one major bleed is a strong indication for surgery, which should be undertaken after recovery from the effects of the haemorrhage. As the portal vein is not available, a porto-caval shunt, which is the best operation for portal hypertension, cannot be performed, and a lienorenal anastomosis<sup>3</sup> is required. It may be necessary to utilize the largest (and least fragile) venous radicle available if the

splenic vein is itself involved in the cavernous process. The consequent splenectomy will cure the hypersplenism and remove from the portal circuit the increased volume of blood contributed to the portal system by the enlarged spleen. To exclude cirrhosis, needle biopsy of the liver is an important pre-operative requirement.

Although this is a rare condition, it should be preventable, as long as one remembers that a seemingly trivial umbilical infection can have such serious consequences in later life.

1. Dreyer, B. J. v. R. and Budtz-Olsen, O. E. (1952): *Lancet*, **1**, 530.
2. *Lancet* (1957): **2**, 29.
3. Sherlock, S. (1955): *Diseases of the Liver and Biliary System*, p. 188. Blackwell, Oxford.
4. Somers, K. (1957): *Brit. Med. J.*, **2**, 335.