

Suid-Afrikaanse Tydskrif vir Geneeskunde

South African Medical Journal

VAN DIE REDAKSIE

KORTISOON BY ASMA

Die behandeling van bronchiale asma val binne die spesiale bestek van die algemene praktisyn. Die talryke patente medisyne en preparate wat in die handel te koop aangebied word, is miskien die beste bewys van die ingewikkeldheid van doeltreffende behandeling. Van al die lyers aan hierdie gebrek, is die mees kommerbarende pasiënte dié wat aan chroniese asma ly of aan status asthmaticus onderhewig is. Enige navorsers wat 'n preparaat kan produseer wat verligting kan verskaf en nooit faal nie, sal 'n seën aan die mensdom bewys. Onlangs het die British Medical Research Council, deur middel van sy kliniese asma-subkomitee, die waarde van kortisoon by pasiënte wat aan asma ly, ondersoek. Die proefneming was onder twee hoofde uitgevoer: (a) chroniese asma, (b) status asthmaticus.

Die behandeling wat aan chroniese asmalyers gegee was, was of kortisoon of 'n placebo-pil, wat identies in voorkoms was. Aan 49 van die 96 pasiënte by 6 sentrums wat by die proefnemings betrokke was, is kortisoon gegee en aan 47, die placebo-pille. Almal was buite-pasiënte tussen die ouderdomme van 16 en 60 jaar, wat vir langer as 3 maande aan asma gely het en by wie daar vir langer as veertien dae geen totale afname van die siekte was nie. Dit was vasgestel dat die kortasemigheid wat aanwesig was aan asma, en nie aan 'n siekte van die lugpype en longe, te wyte was nie; deur hierdie laasgenoemde tipe van geval uit te sluit, is die etiologiese veld ingekort. Boonop is die pasiënte dwarsdeur die jaar gekies om faktore te wyte aan die seisoene uit te sluit. Aan sommige van die pasiënte is meegedeel dat hulle die placebo-pille kry, in geval daar 'n psigogeniese element by sommige aanwesig was. Behandeling in voldoende dosismaat was oor 24 weke versprei en veertiendaaglikse liggaamlike ondersoeke is gedurende die periode gedoen om vooruitgang te bereken. (Pasiënte met akute aanvalle het ook die gebruikelike krampwerende geneesmiddels gekry.) Die berekening was gebaseer op (i) die liggaamlike ondersoek, (ii) oefeningverdraagsaamheid, (iii) werksvermoë en (iv) lewensvermoë. Weens afwesigheid of onttrekking (bv. teringagtige nier, swangerskap, peptiese seer), het 19 van die 96 nie die proefnemings voltooi nie. By die res was daar 'unequivocal evidence of a slight but definite advantage for the cortisone-treated patients as regards improvement in physical signs and exercise tolerance from the 2nd to the 8th week of treatment. From then on in both respects the control patients gained ground, with the result that at the end of this

EDITORIAL

CORTISONE IN ASTHMA

The treatment of bronchial asthma is the especial province of the general practitioner. The numerous patent medicines and proprietary preparations that hold the market are perhaps the best evidence of the complexity of adequate treatment. Of all sufferers from this disability the most distressing patients are the chronic asthmatics and those liable to status asthmaticus. Any research worker that could produce a preparation that would bring relief, and never fail, would be conferring a great boon upon mankind. Recently the British Medical Research Council through the medium of its clinical asthma sub-committee investigated the value of cortisone in patients with asthma. The trial was carried out under two headings: (a) chronic asthma, (b) status asthmaticus.

In chronic asthmatics the treatment given was either cortisone or a placebo tablet identical in appearance. Of the 96 patients in 6 centres that were involved in the trial, 49 were given cortisone and 47 the placebo tablets. All were out-patients between the ages of 16 and 60 years who had suffered from asthma for longer than 3 months and experienced no complete remission for longer than a fortnight. The dyspnoea present was established as due to asthma and not to bronchopulmonary disease; the aetiological field was narrowed by elimination of the latter type of case. Furthermore, patients were chosen around the year in order to eliminate seasonal factors, and some were told of the placebo tablet control, in case a psychogenic element existed in some patients. Treatment in adequate dosage was spread over 24 weeks and fortnightly physical examinations carried out during the period to assess progress. (Patients with acute attacks received the conventional antispasmodic drugs as well). The assessment was based upon (i) the physical examination, (ii) exercise tolerance, (iii) capacity for work and (iv) vital capacity. The results were rather equivocal; of the 96 patients 19 did not complete the trials, by default or withdrawal (e.g. for tuberculous kidney, pregnancy, peptic ulcer). In the remainder there was 'unequivocal evidence of a slight but definite advantage for the cortisone-treated

period there was very little to differentiate between the 2 groups'.¹ Wat vordering in lewensvermoë en werksvermoë betref, was daar geen opvallende verskil tussen die kortisongroep en die kontrolegroep geopenbaar nie. Verder—en dit is 'n belangrike praktiese punt—was heelwat moeilikheid ondervind om die pille, kortisoos sowel as die placebo, te ontnem, aangesien die pasiënte gevoel het dat hulle daar baat by gevind het. Hierdie bevinding is geneig om die belangrikheid van die psigogeniese element by behandeling te beklemtoon, asook die feit dat 'at the end of the treatment period cortisone was causing no specific benefit'. Die gevolgtrekkings was dus dat die pasiënte wat met kortisoos behandel was, gedurende die eerste 2 maande van behandeling subjektief en objektief verbeter het, maar dat hierdie vordering nie volgehou was nie.

Etiese inagnemings verbied die gebruik van 'n placebo by status asthmaticus, en hier was die verskil tussen standaard krampwerende behandeling gepaard met kortisoos en standaard behandeling alleen, ondersoek.² By hierdie reeks was 32 pasiënte by 12 hospitale betrokke, en weereens is die pasiënte blindweg verdeel. Van hulle het 17 net standaard behandeling ontvang en 15, standaard behandeling met bykomende kortisoos. Vir die doel van die proefneming was status asthmaticus omskryf as 'n aanval wat nie binne 24 uur op standaard krampwerende behandeling reageer nie. Al die gevalle was ouer as 14 jaar, almal was vasgestelde asmalyers, en geeneen het vantevore kortisoos ontvang nie. Kliniese berekenings was gebaseer op die graad van lugpypkramp aanwesig—hyging, bykomstige spiere in gebruik, fluiting hoorbaar by die siekbed, fluiting hoorbaar by beluistering, geen bewys van bronchiale verstopping nie—en op die temperatuur b₀ 99°F, die polsslag b₀ 100 per minuut, en die asemhalingspoed b₀ 25 per minuut. Binne 4 dae van behandeling was 10 van die 15 pasiënte wat kortisoos ontvang het (66%), vry van bronchiale verstopping, in vergelyking met slegs 4 van die 17 pasiënte in die kontrolegroepe (23%). Hierdie verskil was tot die einde van die 14-dae periode van behandeling volgehou. Bowendien was 5 van die kontrolegroep wie se toestand kommer gebaar het, daarnà doeltreffend met kortisoos behandel. Hierdie waarneming, dat kortisoos van nut kan wees by gevalle van status asthmaticus wat weerstandbiedend is vir ander vorms van behandeling, is in ooreenstemming met voorheen gerapporteerde terapeutiese berekenings van sy waarde.^{3,4} Die algemene praktisyn, asook die pasiënt, sal inderdaad bemoedig wees om 'n absoluut onfeilbare 'staatsmaker' vir die onbehandelbare aanval van status asthmaticus te besit; dit mag wel wees dat ons dit in kortisoos het. In 'n tydperk waar die geregverdigde gebruike van kortisoos steeds verminder, is dit bemoedigend om te vind dat status asthmaticus sy plek in kortisoos se baan van bruikbaarheid behou. Maar slegs as 'n laaste toevlug. Sy gevaarlike syeffekte in asthmaticus—bespoediging van hartversaking, en verergering liewers as verligting van die ellende van 'n pasiënt met begeleidende infeksie van die lugpype en longe—maak dit onwaarskynlik dat dit die bestaande krampwerende middels as standaard behandeling van die toestand sal vervang. Nogtans sal praktisyns tevrede wees as dit sy vooruitsigte as 'n

patients as regards improvement in physical signs and exercise tolerance from the 2nd to the 8th week of treatment. From then on in both respects the control patients gained ground, with the result that at the end of this period there was very little to differentiate between the 2 groups'.¹ No significant difference between the cortisone group and the control group was manifested as regards improvement in vital capacity and in capacity for work. Moreover—and this is an important practical point—considerable difficulty was experienced in withdrawing the tablets, both cortisone and the placebo, since the patients felt that they were deriving benefit from them. This finding tends to underline the importance of the psychogenic element in treatment, as well as the fact that 'at the end of the treatment period cortisone was causing no specific benefit'. The conclusions, then, were that the patients receiving cortisone were subjectively and objectively improved during the first 2 months of treatment, but that this improvement was not maintained.

In status asthmaticus ethical considerations forbade the use of a placebo, and here the difference was investigated between standard antispasmodic treatment with cortisone, and standard treatment alone.² In this series 32 patients in 12 hospitals were involved, and random division was again made, 17 receiving standard treatment only and 15 standard treatment with additional cortisone. For the purposes of the trial, status asthmaticus was defined as an attack not responding to standard antispasmodic treatment within 24 hours. All cases were over 14 years of age, all were established sufferers from asthma, and none had received cortisone before. Clinical assessment was made on the basis of the degrees of bronchospasm present—gasping, accessory muscles in use, wheezing audible at bedside, wheezing audible on auscultation, no evidence of bronchial obstruction—and upon the temperature above 99°F, the pulse rate over 100 per minute, and the respiration rate over 25 per minute. Within 4 days of treatment 10 patients out of the 15 receiving cortisone (66%) were free of bronchial obstruction as compared with only 4 out of 17 patients in the control group (23%). This difference was maintained to the end of the 14-day period of treatment. Moreover, 5 of the control group whose condition gave cause for concern were all effectively treated subsequently with cortisone. This observation, that cortisone can be useful in cases of status asthmaticus that are resistant to other forms of treatment, is in agreement with previously reported therapeutic assessments of its value.^{3,4} The general practitioner, and also the patient, would be heartened indeed to possess an absolutely certain 'stand-by' for the intractable attack of status asthmaticus; it may well be that we have it in cortisone. In an era when the legitimate uses of cortisone are ever narrowing, it is heartening to find that status asthmaticus retains its place in cortisone's orbit of usefulness. But only as a last resort. Its dangerous side-effects in asthmaticus—precipitation of cardiac failure and aggravation rather than alleviation of the distress of a patient with concomitant bronchopulmonary infection—make it unlikely ever to replace the regular antispasmodics as the standard treatment of the condition. Nevertheless

veilige en onfeilbare mediese 'staatmaker', sal ver-wesenlik.

1. Report by the Sub-committee on Clinical Trials in Asthma (1956): *Lancet*, 2, 798 *et seq.*
2. *Ibid.*, 802.
3. Ball, K. (1954): *Ibid.*, 1, 1162.
4. Pearson, J. E. G. (1955): *Brit. Med. J.*, 1, 189.

practitioners will be satisfied if it can fulfil its expectations as a safe and sure medical 'stand-by'.

1. Report by the Sub-committee on Clinical Trials in Asthma (1956): *Lancet*, 2, 798 *et seq.*
2. *Ibid.*, 802.
3. Ball, K. (1954): *Ibid.*, 1, 1162.
4. Pearson, J. E. G. (1955): *Brit. Med. J.*, 1, 189.

THE DOCTOR'S THREE FACES

The devil was ill
The devil a monk would be.
The devil was well
The devil a monk was he.

A doctor has three faces. The first is that of an ordinary human being, which he presents to the world at large; in times of illness this face becomes that of an angel, only to be transformed to that of a devil when his account is rendered. This little story, which exists in various forms in practically all folk literature, is the key to many of the doctor's difficulties. How to combine with his angel role the need of making a living as an ordinary human being, demanding payment for services rendered in time of illness, and this payment moreover to be made when the patient is well again, is the dilemma which has faced the doctor since time immemorial. It is insoluble, and it would be better if, instead of assuming the face of an angel in time of illness, the doctor could achieve the wisdom of that supernatural being at other times of life.

For it is one of the glories of the profession to render service in time of need, freely and without thought of payment. It is only later, when the account comes to be rendered, that the doctor drops his supernatural mantle and enters into the hurly-burly of business life. The feathers of the angel are dropped and the coat and trousers of modern man are assumed. His erstwhile patient views the transformation with horror and, carrying it a step further, he divests the Beloved Physician of the clothes of the ordinary man and invests him with horns and tail. Old Nick frolics in the doctor's office and the patient's resentment against the demands of this antique horror becomes in his own mind a very laudable

and worthy battle against sin. In the minds of some individuals, when they are not ill, it is actually a good deed to resent the doctor's bill. Human memory is short. The time of illness is soon forgotten and the miserable reminder that arrives monthly can only be attributed to the working of some infernal element in the make-up of the medical man. The problem is age-old. It will not be solved in our generation.

What makes the position even worse for the unfortunate doctor, is that in many cases he is unable to make the patient understand all he has done. A serious disease can be circumvented, but the patient's life may hang in the balance until therapy can take effect. All this must be hidden. It is one of the glories of the profession that the doctor keeps his doubts and difficulties to himself. Because of this, the services that were rendered may be far greater than the patient is able to believe. Yet what doctor worth his salt would care to frighten his patient with difficulties of diagnosis and hesitations and worries about treatment? The doctor is a professional man because he takes the responsibility off the shoulders of his patient. Let the account look after itself! He must expect resentment from ill-informed patients and, although he may reduce the account in case of need, the solution to the problem does not lie in the reduction of fees.

This story does not apply to all private medical practice. There are grateful patients as well as ungrateful ones, and there are patients whose family budgets enable them to pay the full fees with ease. For the others, the solution lies in insurance against doctors' bills, with or without the help of the employer or the State, or alternatively in a State medical service.