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KORTISOON VANDAG

Kortisoon en hidrokortisoon is nog steeds van die mees betwisbare terapeutiese middels in algemene gebruik. Na byna 8 jaar op die ope mark neem die omvang van hulle bruikbaarheid nog steeds af en dit lyk of hulle meer beperkings as werklike gebruike het. Weens hul skynbare potensiële gevare, selfs in terapeutiese kwantiteite, is dit tans die reël om enige lys aanwysings vir kortisoon en hidrokortisoon met net so 'n imponerende lys teenaanwysings in te lei. So behoort dit te wees—des te meer wat kortisoon betref—aangesien min pasiënte die weelde van langdurige behandeling met hierdie geneesmiddels kan bekostig net in die hoop dat hulle daarby sal baat. Aan die anderkant is onkunde oor die relatief min aanwysings vir hulle onvoorwaardelike gebruik—wanneer hulle lewensreddend kan wees—net so afkeurenswaardig.

Gelukkig is die sy-effekte betreklik goed bekend. Die ‚maanvormigheid' van die gesig, die vetsugtigheid van die romp en nek sonder dat die ledemate aangetas word, die spierswakheid weens kaliumverlies ens., is nouliks toksiese uitwerkings, aangesien hulle normale liggaamlike reaksies tot oormatige hoeveelhede van bynierskorshormone is. Nog 'n belangrike uitwerking waarmee rekening gehou moet word, is die liggaam se veranderde reaksie tot besmetting; byvoorbeeld by 'n pasiënt wat met kortisoon behandel word, mag 'n akuut ontsteekte blindederm perforeer en buikvliesontsteking mag intree, sonder dat daar enige verontrustende pyn of liggaamlike tekens is. 'n Sluimerende tuberkulosefokus mag weer aktief word, of ernstige bloeding mag in 'n longholte plaasvind. Groter dosisse van kortisoon —farmakologiese in teenstelling met fisiologiese—mag 'n gevoel van valse sekuriteit skep deurdat dit die simptome verlig en die plaaslike en algemene reaksies onderdruk, terwyl die onderliggende siekteproses onverwyld voortgaan, bv. lobêre longontsteking.[1] 'n Ander werklike gevaar lê in die té skielike staking van geneeskundige behandeling; figuurlik gesproke, sus kortisoon die bynier aan die slaap en die klier moet eers wakker gemaak word voordat dit sy fisiologiese afskeidingsritme kan hervat. Sterfte te wyte aan akute byniergebrek is 'n baie reële gevaar, tensy die dosisse geleidelik verminder word voordat dit heeltemal gestaak word. Die gedugter sy-effekte dikteer die teenaanwysings; nl., (1) hartverswakking—maar nie die akute-rumatiekoorstipe, of ernstige drukverhoging nie, (2) kroniese nierverswakking, (3) ernstige infeksies, (4) 'n peptiese seer of selfs 'n geskiedenis van dispepsie, (5) ongeneesde tuberkulose-letsels, en (6) geestelike instabiliteit.

EDITORIAL

CORTISONE TODAY

Cortisone and hydrocortisone remain among the most controversial therapeutic substances in general use. After nearly 8 years on the open market their range of usefulness is still diminishing, and they seem to have come to possess more limitations than actual uses. On account of their apparent potential dangers, even in therapeutic quantities, it is the rule nowadays to preface any list of their indications with an equally formidable list of contra-indications. This is as it should be—the more so with cortisone since few patients can afford the luxury of prolonged treatment with these drugs in the mere hope that they may do some good. On the other hand, ignorance of the relatively few absolute indications for their use—where they may be actually life-saving—is equally reprehensible.

Fortunately the side-effects are fairly well known. The 'mooning' of the face, the obesity of the trunk and neck with sparing of limbs, the muscular weakness from potassium loss, etc., are hardly toxic effects, since they are normal bodily responses to excessive amounts of adrenocortical hormones. Another important effect to be bargained with is the body's altered response to infection; for example, in a patient on cortisone therapy an acutely inflamed appendix may perforate and peritonitis may supervene, without alarming pain or physical signs. A quiescent tuberculous focus may become re-activated or a severe haemorrhage may take place into a lung cavity. In larger—pharmacological, as opposed to physiological—doses, cortisone may easily induce a sense of false security by relieving the symptoms, through suppression of local and general responses, whilst the underlying disease-process continues apace, e.g. lobar pneumonia.[1] Another real danger is the risk of ceasing therapy over-abruptly; cortisone puts the adrenals to sleep, so to speak, and the gland has to be wakened before it can resume its physiological rhythm of secretion. Death from acute adrenal insufficiency is a very real danger unless the dose is gradually tailed off before being stopped altogether. The more formidable of these side-effects dictate the contra-indications, viz. (1) cardiac failure, other than the acute-rheumatic-fever type, or severe hypertension, (2) chronic renal failure, (3) severe

Die besluit om kortisoon te gebruik, behoort dus altyd met die grootste sorg geneem te word. Veral waar behandeling waarskynlik langdurig sal wees, moet die moontlikheid dat sy-effekte tot ernstige komplikasies kan ontwikkel, in gedagte gehou word, ‚since it is easier to start than to stop administering cortisone'.[1] Die *absolute* aanwysings vir die gebruik van die geneesmiddels—d.w.s. toestande waar geen ander vorm van behandeling waarskynlik ewe doeltreffend sal wees nie—is beperk, en val meestal in die bestek van die spesialis-internis. Daar bestaan twee sulke groepe. Eerstens kry ons die gevalle van bynier-hormoongebrek waar kortisoon, in fisiologiese dosisse, 'n verstandige vervangingsbehandeling is. Hierdie toestande behels Addison se siekte, Simmond se siekte, chirurgiese verwydering van die bynier om die groei van 'n onopereerbare bors- of prostaatgewas te vertraag, of bynier-atrofie wat veral gedurende die kinderjare as 'n komplikasie van 'n ernstige infeksie van die stuitbeentjie voorkom. Die ander groep sluit toestande in waar kortisoon in farmakologiese dosisse lewensreddend kan wees—verspreide lupus erythematosus (wanneer dit die enigste geneesmiddel is wat enige hoop aanbied), blaarkoors (veral wanneer groot gedeeltes van die liggaam-oppervlakte betrokke is), gevalle van status asthmaticus wat nie op ou-beproefde metodes vir verligting reageer nie, vroeë gevalle van knopvormige slagaarontsteking, en aangebore bynier-hiperplasie.[2]

Die *relatiewe* aanwysings is legio en tog nie grensloos nie, en ook hier moet individueel verstandig geoordeel word. By kollageen-siektes, en veral by misvormende gewrigsontsteking, waarvoor die hormoon in die eerste instansie gebruik was, word die onoordeelkundige gebruik daarvan nou afgekeur. Gegrond op die basis van hulle proefnemings, het die British Medical Research Council tot die gevolgtrekking gekom dat aspirien net so doeltreffend soos kortisoon in die vroeë stadiums is. Wanneer daar later wel 'n pleidooi vir die gebruik van kortisoon gehou kan word, is dit moontlik dat behandeling so langdurig en ingewikkeld mag wees, dat dit 'n spesialis se aandag verg. In hierdie verband is Hench se opinie, wat hy op die First Pan-American Congress of Rheumatology in 1955 uitgespreek het, interessant, d.w.s. dat in *akute* toestande dit die doel van die behandeling is om beheer uit te oefen en dat die dosis bepaal word deur die ernstigheid van tekens en simptome eerder as deur die ontwikkeling van sy-effekte. In *kroniese* toestande is die doel om 'n gulde middelweg tussen verligting van simptome en die ontwikkeling van sy-effekte te vind en die dosis word deur die ontwikkeling van laasgenoemde, eerder as deur die ernstigheid van die siekte, bepaal. Afgesien van die kollageen-siektes, is oogheelkunde en dermatologie die belowendste terrein vir kliniese toepassing. Kortisoon kan bv. by sekere soorte van ekseem en gekeurde gevalle van ‚dermatitis' van aansienlike waarde wees, terwyl dit vir gevalle van simpatiese oogontsteking, waar beide oë bedreig word, onontbeerlik beskou kan word.

1. Bayliss, R. I. S. (1955): Lancet, **2**, 1078.
2. Van die Redaksie (1955), *Ibid.*, **2**, 1071.

infections, (4) peptic ulceration or perhaps even a history of dyspepsia, (5) unhealed tuberculous lesions, and (6) mental instability.

The decision to use cortisone should therefore always be made with extreme care. Particularly where treatment is likely to be prolonged, the possibility of side-effects developing into dangerous complications must be borne in mind 'since it is easier to start than to stop administering cortisone'.[1] The *absolute* indications for the use of the drugs—i.e. conditions where no other form of treatment is likely to be as effective—are few and mostly in the province of the specialist physician. There are two groups of them. Firstly come the cases of adrenal hormonal insufficiency, where cortisone in physiological dosage is rational replacement therapy. These conditions include Addison's disease, Simmonds' disease, adrenalectomy surgically performed to retard the growth of an inoperable breast or prostate tumour, or adrenal atrophy presenting as a complication of an overwhelming coccal infection, especially in childhood. The other group comprises conditions in which cortisone in pharmacological doses may be life-saving—disseminated lupus erythematosus (where it is the only drug offering any hope), pemphigus (especially where large areas of body surface are involved), unresponsive cases of status asthmaticus where older-established methods fail to bring about relief, early cases of polyarteritis nodosa, and congenital adrenal hyperplasia.[2]

The *relative* indications are legion yet not without boundary, and here also individual assessment requires wise judgment. In the collagenous diseases and particularly rheumatoid arthritis, for which the hormone was first advanced, its uncritical use is now condemned. The British Medical Research Council concluded on the basis of its trials that aspirin is as good as cortisone in the early stages. Later on, when a case can be made out for the use of cortisone, treatment is likely to be so prolonged and involved that specialist considerations come into the picture. In this connection it is interesting to note Hench's opinion, given at the First Pan-American Congress on Rheumatology in 1955; it was that in *acute* conditions the aim of treatment is to control, and the dosage is governed by the severity of signs and symptoms rather than the development of side-effects. In *chronic* conditions the aim is to strike a happy medium between relief of symptoms and the development of side-effects, and the dosage is governed by the development of the latter rather than the severity of the disease. Apart from the collagenous diseases, the most promising fields of clinical application have been in ophthalmology and dermatology. In certain eczemas and selected cases of 'dermatitis', for example, cortisone may be of considerable value; while in cases of symphatic ophthalmia where both eyes are threatened it may be considered essential.

1. Bayliss, R. I. S. (1955): Lancet, **2**, 1078.
2. Editorial (1955): *Ibid.*, **2**, 1071.

BONE AND JOINT TUBERCULOSIS

Some diagnostic saws are as unchanging as the laws of the Medes and Persians. Generations of medical students have graduated and grown wise in their application. One which, regrettably, remains appropriate for South African Native practice is that which states that any child with a limp should be regarded as suffering from tuberculosis until proved otherwise. In a recent issue of the *Lancet*, however, a determined effort, backed by cases and statistics, was made to prove the growing fallacy of this assumption so far as Western medicine is concerned. Mills, Owen and Strach, of the Liverpool orthopaedic school, make out a strong case for an early definitive diagnosis in all bone and joint lesions by means of biopsy.[1] They argue that since (*a*) the early vascular stage of tuberculous disease of bones and joints is the most responsive to intensive therapy, and (*b*) non-tuberculous cases should not be submitted unnecessarily to a long period of immobilization or the possible harmful effect of antituberculous drugs, early diagnosis is the key to the problem. Mills and his colleagues performed biopsies on 60 consecutive cases, removing material from the joint cavity, a regional lymph-node, the synovial membrane, or bone. Of these 60 cases, 35 were proved to be infected with tuberculosis and 20 were definitely negative, the remaining 5 cases being classified as 'doubtful'.

Because of the remarkably rapid recession of tuberculosis from the front line of medicine over the last decade—as much as 70% in some British children's hospitals, it is said[2]—fully-developed cases of bone and joint tuberculosis are likely to become rarities, and tuberculosis relatively less important as an aetiological factor. Attitudes are changing; the younger generation of orthopaedic surgeons probably already regards tuberculosis as a well-circumscribed and eminently-treatable entity, not to be confused with the larger and vaguer group of non-specific disorders of bone and joint. It is precisely for this reason, state Mills and his colleagues, that one should forbear to say, over each child with a limp, 'It must be tuberculous'. Rather make a pathological diagnosis from the beginning by performing a biopsy, a procedure that they found to be simple and free of sequelae in their series. This is a logical and persuasive argument, and they enhance it by two further points: (1) Lengthy treatment with streptomycin may alter the histological appearances of a diseased part beyond all recognition, and consequently make even a positive retrospective diagnosis impossible. (2) If a positive diagnosis of tuberculosis cannot be proved pathologically, the clinical picture should decide the treatment. In most of the 'doubtful' cases in their series, a full course of antituberculous chemotherapy was given.

1. Mills, T. J., Owen, R. and Strach, E. H. (1956): Lancet, **2**, 57.
2. Editorial (1956): *Ibid.*, **2**, 77.