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EDITORIAL

TREATMENT OF INTESTINAL AMOEBIASIS

Assessment of results of treatment of intestinal amoebiasis is complicated by the difficulty of conducting adequate follow-up studies, particularly in backward communities, by controversy on what constitutes pathogenicity in the cystic and vegetative forms of amoebae, and by the difficulty in deciding on clinical grounds between true relapse and post-dysenteric colonic syndromes.

It is still uncertain what is the best form of treatment of the disease in spite of much research in recent years and the development of new amoebicidal drugs.

In 1912, Rogers, who had used ipecacuanha with fair success, popularized the use of emetine, its active principle, in the treatment of amoebiasis, and this drug and its iodine compounds (emetine-bismuth-iodide, auremetin, etc.) together with the trivalent arsenicals (stovarsol, carbasone, milibis) and the iodo-oxyquinolines (chiniofon, vioform, diodoquin) were the sheet-anchor in the treatment of the disease and its complications for over 30 years.

There was some dissatisfaction with the results of this treatment, partly because of an exaggerated fear of the toxic effects of emetine and the arsenical compounds. Emetine-bismuth-iodide gave uncertain results, but it is now well known that the method formerly used of dispensing the substance in keratin-coated tablets permitted their passage through the bowel unabsorbed.

In South Africa, Armstrong *et al.*,[1] working in Natal, where a particularly severe form of amoebiasis is frequent in the Bantu population, carried out an impressive series of researches into the efficacy of various drugs, and found that as far as immediate control of the disease was concerned, a combination of emetine and diodoquin was effective in itself, and that the effects were enhanced by the addition of sulphasuccidin and penicillin. No information on relapse rates were available. EBI by mouth was as effective as emetine by injection.

During the last half-dozen years the amoebicidal value of the antibiotics has been receiving increasing attention. Most *et al.*,[2] in Korea, and the Natal group of workers, Elsdon-Dew, Armstrong and Wilmot,[3] obtained encouraging results with oxytetracycline (terramycin).

VAN DIE REDAKSIE

BEHANDELING VAN INGEWANDSAMEBIASE

Berekening van resultate van die behandeling van ingewandsamebiase word ingewikkeld gemaak deur die moeilikheid om geskikte opvolgingsstudies uit te voer, veral in agterlike gemeenskappe, deur geskil oor wat patogeniteit by die sistiese en vegetatiewe vorms van amebes uitmaak, en deur die moeilikheid om op kliniese gronde tussen ware hervatting en na-disenteriese sindrome van die dikderm te besluit.

Ten spyte van baie navorsingswerk wat gedurende die afgelope jare gedoen is en die ontwikkeling van nuwe amebisidale geneesmiddels, is dit nog onseker wat die beste vorm van behandeling van die siekte is.

In 1912 het Rogers, wat ipekakuanha met 'n mate van sukses gebruik het, die gebruik van emetien, sy aktiewe bestanddeel, gewild gemaak by die behandeling van amebiase, en hierdie geneesmiddel en sy jodiumverbindings (emetien-bismut-jodied, ouremetien, ens.) tesame met die driewaardige organiese arseenverbindings (stovarsol, karbasoon, milibis) en die jodo-oksichinoliene (chiniofon, vioform, diodochin), was vir langer as 30 jaar die nood-anker by die behandeling van die siekte en sy komplikasies.

Daar was 'n mate van ontevredenheid met die resultate van hierdie behandeling, gedeeltelik weens 'n oordrewe vrees vir die toksiese uitwerkings van emetien en die arseenhoudende verbindings. Resultate met emetien-bismut-jodied was onseker, maar dit is nou welbekend dat die metode wat voorheen gebruik is om die stof in keratien-oorgetrekte tablette op te maak, toegelaat het dat hulle ongeabsorbeerd deur die ingewande gaan.

In Suid-Afrika het Armstrong *et al.*,[1] terwyl hulle besig was met navorsing in Natal waar 'n besonder strawwe vorm van amebiase dikwels by die Bantoebevolking voorkom, 'n indrukwekkende reeks navorsings in die doeltreffendheid van verskeie geneesmiddels uitgevoer en gevind dat, sover dit onmiddellike beheer van die siekte betref, 'n verbinding van emetien en diodochin of sigself doeltreffend was, en dat die uitwerkings met die byvoeging van sulfasuksidien en penisillien verhoog was. Daar was geen inligting aangaande die hervattingssyfers beskikbaar nie. Mondelikse toediening van EBI was net so doeltreffend soos die toediening van emetien deur inspuiting.

Gedurende die afgelope halfdosyn jare het die amebisidale waarde van die antibiotika tonemende aandag geniet. Most *et al.*[2] in Korea, en die Natalse groep navorsers Elsdon-Dew, Armstrong en Wilmot,[3] het bemoedigende resultate met oksitetrasiklien (terra-

The usefulness of these drugs should be assessed in the light of their high cost and the danger of producing resistant staphylococci and other bacteria, and by the uncertainty about relapse rates after this form of treatment.

In a recent symposium of the Royal Society of Tropical Medicine and Hygiene, Woodruff *et al.*[4] described the results of therapeutic trials carried out in London on a large series of patients, who were drawn from most parts of the world, mainly from India and tropical Africa, to compare the effects of some of the newer anti-amoebic substances and the antibiotics, with those of EBI used alone or in combination with other drugs. Their conclusions, drawn from a study of 417 patients, are that EBI is the most satisfactory drug available at present. Relapse rates with chloramphenicol and chlortetracycline (aureomycin) were high, but oxytetracycline (terramycin) gave good results. Toxic effects, including dermatitis and albuminuria, occurred with the use of fumagillin. Treatment with glaucarubin, camoform and dichloracethydroxymethylanilide had at best no advantages over the older drugs.

On grounds of efficacy, ease of administration and cost, emetine appears to have retained pride of place as an amoebicide for routine use, in spite of efforts to replace it by newer drugs. In South Africa, certainly in European patients, in whom the disease tends to be less severe than in the Bantu, available evidence points to the following routine as being the best standard form of treatment. In acute cases a daily injection of 1 gr. of emetine is given for 3 days to produce rapid control of the symptoms, followed by an enteric-coated 3-gr. tablet of EBI nightly for 10 days together with a sedative to overcome nausea, which generally appears after 2 or 3 days. This is followed by 10 tablets of diodoquin daily for 20 days. Antibiotics should be reserved for patients who relapse after the course of EBI.

In the Bantu the disease often assumes a fulminating form, with gross ulceration of the colon and rectum and associated sepsis, and the combination of antibiotic drugs with the treatment already outlined will enhance the chances of immediate control and permanent cure.

As regards hepatic complications, the anti-malarial substance, chloroquine, used in combination with parenterally administered emetine, is a specific antidote against amoebiasis of the liver, but it has no apparent effect on intestinal infections.

1. Armstrong, T. G., Elsdon-Dew, R. and Marot, R. J. (1949): S. Afr. Med. J., **23**, 369.
2. Most, H., Tobias, J. E., Bosicevish, J. and Reardon, L. V. (1950): Pub. Hlth. Rep. (Wash.), **65**, 1684.
3. Elsdon-Dew, R., Armstrong, T. G. and Wilmot, A. J. (1952): Lancet, **2**, 104.
4. Woodruff, A. W., Bell, S. and Schofeld, F. D. (1956): Trans. Roy. Soc. Trop. Med. Hyg., **50**, 109.

misien) gekry. Die bruikbaarheid van hierdie geneesmiddels behoort bereken te word in die lig van hulle hoë koste en die gevaar dat weerstandbiedende stafilokokke en ander bakterieë voortgebring mag word, en deur die onsekerheid aangaande die hervattingssyfer ná hierdie vorm van behandeling.

In 'n onlangse simposium van die Royal Society of Tropical Medicine and Hygiene, het Woodruff *et al.*[4] die resultate van terapeutiese proefnemings beskryf wat in Londen op 'n groot reeks pasiënte uitgevoer is, wat van byna al die dele van die wêreld, hoofsaaklik van Indië en tropiese Afrika, verkry was, om die uitwerkings van sommige van die nuwer anti-amebiese stowwe en die antibiotika te vergelyk met dié van EBI wat alleen of in verbinding met ander geneesmiddels gebruik is. Die gevolgtrekkings waartoe hulle gekom het na 'n studie van 417 pasiënte, is dat EBI die mees bevredigende geneesmiddel is wat op die oomblik beskikbaar is. Hervattingssyfers met chlooramfenikol en chloortetrasiklien (oureomisien) was hoog, maar oksitetrasiklien (terramisien) het goeie resultate gelewer. Toksiese uitwerkings, insluitende huidontsteking en albuminurie, het by die gebruik van fumagillien voorgekom. Op sy beste het behandeling met gloukarubien, kamoform en dichlooraset-hidroksiemetielanilied geen voorsprong op die ouer geneesmiddels gehad nie.

Op grond van doeltreffendheid, gemak van aanwending, en koste, skyn dit of emetien, ten spyte van pogings om dit met nuwer geneesmiddels te vervang, sy ereplek as 'n amebisied vir roetiene gebruik behou het. Beskikbare bewys vestig die aandag daarop dat in Suid-Afrika, sekerlik by blanke pasiënte by wie die siekte geneig is om minder straf te wees as by die Bantoe, die volgende roetine die beste standaard vorm van behandeling is. By akute gevalle word 'n daaglikse inspuiting van 1 gr. emetien vir 3 dae gegee om 'n spoedige beheer oor die simptome te kry, gevolg deur 'n 3-gr. dermpil van EBI elke aand vir 10 dae, tesame met 'n kalmeermiddel om mislikheid, wat gewoonlik na 2 of 3 dae voorkom, te bowe te kom. Dit word gevolg deur 10 diodochin-pille daagliks vir 20 dae. Antibiotika behoort gereserveer te word vir pasiënte by wie die siekte ná die EBI-reeks hervat.

By die Bantoe neem die siekte dikwels 'n uitbarstende vorm aan met ernstige ulserering van die dikderm en nersderm, en geassosieerde sepsis, en die kombinasie van antibiotiese geneesmiddels met die behandeling, waarvan die hoofpunte alreeds beskrywe is, sal die kanse van onmiddellike beheer en permanente kuur verhoog.

Wat komplikasies van die lewer betref, is chloorochien, die anti-malaria stof, wat saam met parenteraal toegediende emetien gebruik word, 'n spesifieke teengif teen amebiase van die lewer, maar dit het geen sigbare uitwerking op infeksies van die ingewande nie.

1. Armstrong, T. G., Elsdon-Dew, R. en Marot, R. J. (1949): S. Afr. T. Geneesk., **23**, 369.
2. Most, H., Tobias, J. E., Bosicevish, J. en Reardon, L. V. (1950): Pub. Hlth. Rep. (Wash.), **65**, 1684.
3. Elsdon-Dew, R., Armstrong, T. G. en Wilmot, A. J. (1952): Lancet, **2**, 104.
4. Woodruff, A. W., Bell, S. en Schofeld, F. D. (1956): Trans. Roy. Soc. Trop. Med. Hyg., **50**, 109.

CAESAR'S WIFE

A doctor's reputation, like that of a woman, has been compared with a mirror—the merest breath clouds it. It is unnecessary that a doctor do anything illegal, unethical or immoral, the very suggestion that he might ever be capable of doing these things is sufficient to besmirch this very delicate flower.

The doctor, for this reason, has always been in a very vulnerable position. Quite apart from his professional activities, which he is obliged to carry out in a strictly ethical way, his lay activities are constantly in the public eye and the least comment on these is often fatal to his professional status. It has been said that in business there is no such thing as bad publicity—so far as a doctor's business is concerned, there is no such thing as good publicity. All of us who have practised our profession are aware of these pitfalls and beware of them. There is a fairly strict selection of the type of man who is going to become a doctor, which is made early on in his academic career, and this selection operates all through the long years of his study and apprenticeship. So it should be, and long may it continue so to be.

But the very vulnerability of the doctor's position makes it incumbent on all intelligent men to consider very carefully the consequences that may arise out of foolish, malicious or merely idle chatter. More than anyone else, doctors should consider this position and be most careful about making their colleagues the subjects of tea-table conversation or bar-room talk. The damning with faint praise and the slightest suggestion of professional or personal lack of complete integrity should all be abjured and while the general public cannot be expected to be aware of all the nuances and implications of light talk, more must be expected from medical men; it is one of the restrictions to which doctors are subject and a restriction moreover which we should be proud to preserve.