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SODIUM FUSIDATE

Sodium fusidate (BP) (Fucidin) is a potent antistaphylococcal antibiotic developed in 1962 by Leo Laboratories. Nearly all strains of *Staphylococcus aureus,* including those resistant to penicillin, are outstandingly sensitive to this drug,[1] and are inhibited by concentrations as low as 0·03 - 0·12 μg./ml. Very high blood levels are obtained after oral administration. The drug tends to be cumulative in effect so that levels of between 100 and 200 μg./ml. may be obtained in the serum after 3 or 4 days' administration.[2] The antibiotic becomes highly bound to protein, but this does not seem to interfere with its clinical efficacy, perhaps because the binding is reversible. As more of the antibiotic diffuses into tissues more is probably liberated from the bound state.

Fucidin has a basic steroid nucleus and shows some of the characteristics of steroids in general. For example its ambivalent solubilities may account for the unusual ability of the antibiotic to attain active concentrations in various tissues and penetrate tissue barriers. Active concentrations have been found in the quiet eye,[3] in pus,[4] in avascular bone and even in sequestra,[5] and penetration through the skin has also been demonstrated when the drug is applied topically under experimental conditions. Indeed it appears to be the only antibiotic which penetrates the skin as effectively as the corticosteroids. Unlike the steroids, however, Fucidin has not been shown to possess any particular hazard or toxicity. Gastro-intestinal irritation, usually nausea and occasionally vomiting, occurs in a number of patients, but no pattern of toxicity has been attributed to the antibiotic in clinical use over the past 7 years. Gastro-intestinal upset can usually be minimized or controlled if the drug is taken with a meal or an antacid in those patients who complain of nausea.

Although Fucidin *in vitro* shows antibacterial activity to other organisms, including corynebacteria and clostridia, its clinical use has been largely confined to the treatment of infections due to *Staphylococcus aureus.* Resistance to the drug occurs fairly readily *in vitro* but does not seem to emerge commonly in clinical practice.

Fucidin has been used in the treatment of severe staphylococcal infections. Presumably because of its ability to penetrate avascular tissue it has been successful in the treatment of such severe staphylococcal infections as endocarditis, osteomyelitis, and pneumonia, often after other potent antistaphylococcal agents had failed.[6-8] In the treatment of bone and joint infections it has been suggested that the results are so good that the drug should be considered as the first line of treatment.[9] It has also been used in combination with other antibiotics including erythromycin, penicillin, lincomycin, novobiocin and with semi-synthetic penicillins like cloxacillin and methicillin. With most antibiotics there appears to be an additive and sometimes a synergistic effect, but there has been controversy about the combination of the drug with semi-synthetic penicillins like methicillin and cloxacillin. However, in a large series of 270 cases treated with Fucidin and methicillin very good results were obtained in such conditions as staphylococcal pneumonia, endocarditis, septicaemia, and osteomyelitis.[10] No clinical evidence of antagonism was observed.

In the neonate Fucidin has been used from the date of birth in 40 infants, sometimes for periods as long as a year, without producing any evidence of toxicity.[6]

The drug is normally available for oral use as capsules and as a suspension, but an intravenous form has recently become available for the treatment of patients who are unconscious or in whom gastric absorption cannot be relied upon. In one such patient intravenous infusion apparently proved life-saving, once again after other potent antistaphylococcal agents had failed.[11]

The dose of Fucidin can be calculated on the basis of 20 - 40 mg./kg. body-weight. The average adult dose is 1·5 G daily, usually given as 2 capsules (250 mg. each) three times a day. Because of the slow excretion of the drug, administration every 6 hours is not necessary. Unlike most other antibiotics Fucidin is excreted mainly through the bile and only very small amounts appear in the urine.

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VOORGEBOORTE OEFENINGE VIR SWANGER VROUENS

Die Suid-Afrikaanse Geneeskundige en Tandheelkundige Raad het onomwonde uitsluitsel gegee ten opsigte van wie mag en wie nie mag klasse adverteer vir voorgeboorte oefeninge vir swanger vrouens. Die Raad erken slegs die dienste van geregistreerde fisioterapeute, en geneeshere wat pasiënte na enige ander persone verwys vir versorging oortree die etiese reëls van die beroep.

Nou wonder mens of hierdie uitspraak van die Mediese Raad nie in hersiening geneem moet word nie. Is dit nie bietjie te eng gestel nie? Ons wil geensins die Raad te na kom en voorgee dat die besluit onwys was of selfs ondeurdag nie, maar met die voortdurende ontwikkeling wat daar op die gebied van die geneeskunde plaasvind—en die afdeling verloskunde staan hierin nie agteruit nie—is dit noodsaaklik dat reëls voortdurend in die lig van nuwe kennis en ervaring hersien moet word. Deur summier uitspraak te lewer dat slegs fisioterapeute voorgeboorte klasse mag adverteer word 'n groot aantal goed gekwalifiseerde

persone buite rekening gelaat, en, ewe belangrik, word 'n aantal persone die reg toegesê wat miskien nie heeltemal oor die nodige ervaring beskik nie.

'n Vroedvrou kan nie 'n fisioterapeut se werk behartig nie, ewemin as wat 'n fisioterapeut verloskundige ingrepe kan uitoefen. Maar 'n vroedvrou (en deesdae, met enkele uitsonderings, beteken dit ook 'n algemeen opgeleide verpleegster) met 'n paar maande bykomstige opleiding in die tegnieke van massering en dies meer sal tog seker van onskatbare waarde kan wees by voorgeboorte oefeninge. Die Verpleegstersraad het weggedoen met die opleiding van slegs vroedvroue en diegene wat nog as sulks op die register is, sal mettertyd aftree, sodat ons binnekort slegs verpleegsters wat algemene opleiding het in die kraamafdelings sal sien. Moet ons nie aan die fisioterapeute vra of hulle ons asseblief sal help om hierdie verpleegsters leiding te gee om die nodige kennis te bekom wat hulle instaat sal stel om die swanger vrouens die beste voorgeboorte diens te verskaf nie? En dan moet ons ook die Mediese Raad versoek om hul regulasies so te wysig dat die spesiaal daartoe opgeleide vroedvroue ook voorgeboorte klasse mag reël en verwysings van dokters mag ontvang.

Aan die ander kant is ons ook van mening dat 'n fisioterapeut nie sondermeer as bevredigend opgelei beskou moet word om swanger vrouens te hanteer nie. Is fisioterapeute bewus van die vroeë tekens en simptome van placenta praevia; of van abruptio placentae? Kan hulle werklik geskoolde advies gee aan vrouens met drukkings verskynsels tewyte aan ongewone liggings? Net soos ons nie graag sou wou sien dat verpleegsters sonder verdere onderrig fisioterapeutiese dienste op hul skouers neem nie, wil ons ook graag voorstel dat fisioterapeute eers bykomstige skoling moet ontvang alvorens hulle toegelaat word om met swangerskappe bemoeid te wees. As ons sulke wedersydse bepalings aanvra voel ons nie dat ons met reg daarvan beskuldig kan word dat ons partytrek en iemand aan die gesig vat nie.

Waarteen ons wel te velde wil trek is die groot aantal voorgeboorte 'gimnasiums' waar volkome onopgeleide personeel aan die publiek dienste lewer waartoe hulle beslis nie opgewasse is nie. Mits hy nie in die amptelike mediese vakliteratuur adverteer of verwysings van geneeshere ontvang nie, is daar skynbaar niks wat enigeen verhoed om gereelde klasse vir swanger vrouens aan te bied nie. Dit is nie goed genoeg nie, want die jong swanger vrou is maar te geneig om haar 'n rad voor die oë te laat draai en allerhande imponerende apparaat te beskou as bewys van spesiale kennis en bekwaamheid. Ons kan werklik nie langer toesien dat ons verwagtende moeders aan die gevare van sulke ongeskoolde versorging onderwerp word nie.

Met die alomteenwoordige neiging tot spesialisering en selfs oorspesialisering is daar bes moontlik selfs ander persone wat hulself as korrek opgelei beskou, en aangesien ons nou wil vra dat die hele aangeleentheid weer op hoë vlak bespreek word, is dit nou die wel aangewese tyd vir diegene wat ander kwalifikasies op dié gebied besit om na vore te kom en hul saak te stel. Ons moet waak teen toegeeflikheid wat tot gevolg kan hê die toelating van onvoldoende opgeleide persone tot die mediese en paramediese dienste, maar aan die ander kant moet ons oppas om nie krampagtig vas te hou aan verouderde norme nie. Dan kan ons al te maklik daarvan beskuldig word dat ons wal gooi slegs weens finansiële redes, om te verhoed dat ons brood en botter van ons weggeneem word, ongeag die belange van die pasiënt.

Ons het in die verbygaan verwys na instansies wat graag imponerende apparaat gebruik om die indruk te skep dat hoogs wetenskaplike behandeling daar beskikbaar is en toegepas word. Ongelukkig is dit ook nie altyd net die niemediese of paramediese personeel wat sulke twyfelagtige metodes gebruik om die publiek te beïndruk nie. In ons eie geledere is daar kollegas wat nie al te versigtig is om eers vas te stel of 'n masjien met indrukwekkende liggies en knoppies wel enige diagnostiese of terapeutiese waarde het nie. Mens kry soms die indruk dat 'n gleufie vir muntstukke 'n nog groter aanbeveling vir die instrument sou wees.

METRICATION

Very soon we will no longer donate pints of blood or prescribe 8 oz. of Mist. Expect. Stim. (for what it is worth), but will have our blood withdrawn in millilitres and will drink our evil-tasting medicines by the same measure. The change-over from our old monetary system to the present decimal coinage was relatively painless, but we must be under no illusions about the difficulties that will be encountered during the coming total conversion to the metric system. Nevertheless it is the duty of everyone, from the scientist to the housewife, to ensure that the change-over is completed as soon as possible. The only way in which this can be ensured is by making a point of not reverting to the imperial measures, but of making a clean break and learning to 'think metric'.

The internationally accepted list of abbreviations for the various metric standards has now been released by the Bureau of Standards and we will be adjusting our 'Instructions for Authors' to conform with this new list. Prospective authors are requested to consult our list of abbreviations before writing their articles.

In the near future we will publish a fairly comprehensive article about the possible pitfalls of the metric system in connection with pharmaceutical preparations, and before the intended change-over date we will publish, as a loose insert in the *Journal*, a complete conversion table as issued by the Metrication Board. It is important that only this official table is used in order to prevent confusion.

One of the main reasons why the change to the metric system will now cause more problems than the switch-over to decimal coinage did, is that conversion has to take place on so many fronts. Not only will we buy our potatoes by the kilogram, but we will also proceed to the greengrocer at so many kilometres per hour. And if we are thirsty while waiting to be served we will have half a litre of cool-drink. If all this causes indigestion we cannot even take a tablespoonful of milk of magnesia; it will have to 4 or 5 millilitres measured out with the correct, official spoon.