

DISCUSSION

Chairman: I am going to give the first questions to Dr Connolly; they are all associated with rubella.

Dr J. N. Lewis (Belfast): You mentioned that rubella-type rashes may be caused by viruses other than rubella. Is there any clinical or biological method of differentiating these rashes?

Dr Connolly: We have found that certain cases of measles, some cases of glandular fever and certain cases of enterovirus infection may have rashes which clinically are indistinguishable from rubella. We can help you from the laboratory point of view, in that we can confirm whether it is a measles or an enterovirus infection. The Paul-Bunnell test will distinguish glandular fever from the other virus infections.

Dr. M. F. Lennon (Dublin): For how long after the appearance of the rash in rubella should the child be isolated?

Dr Connolly: We know that when the foetus is infected with rubella virus in the first trimester of pregnancy it may still be excreting the virus at birth, and nurses in maternity hospitals can be infected from this source. We do not know exactly how long the child with rubella should be isolated. We can assume from epidemiological studies that the child is infectious from a few days before the onset of the illness to probably about a week after the onset.

Dr R. J. Millar (Ballynure): Which blood test should be used for diagnosis of rheumatoid arthritis—the latex or the Rose-Waaler?

Dr W. G. Irwin (Belfast): What are the minimal diagnostic criteria for polymyalgia rheumatica?

Dr Cardoe: It depends entirely on the laboratory services available. In research work the differential agglutination titre, or sheep cell agglutination tests are necessary. For diagnostic purposes, the R.A. slide test is adequate, but you must remember that only approximately 85 per cent of them may be positive; 15 per cent of rheumatoid cases being negative, so it may not be much help by itself in the diagnosis of rheumatoid arthritis. Polymyalgia rheumatica is as the name suggests, multiple muscle pains. The patient has purely muscle pains and no joint pains, it tends to occur in the older age group, and the sedimentation rate is always high. With these criteria, provided rheumatoid arthritis has been excluded, one is justified in starting steroid therapy because it is essentially a disease that responds to short-term steroid treatment.

Dr Elmes: How long do they require treatment?

Dr Cardoe: This varies considerably, but I usually keep them on steroid therapy until the sedimentation rate has dropped to normal for at least three months; then I withdraw it. This means about six months to one year.

Dr R. J. Millar (Ballynure): How often should workers in an asbestos

factory undergo chest radiography and what is the danger of exposure to irradiation?

Dr P. C. Elmes: Radiographs in asbestos workers are of no value to the individual. Even if you do detect radiological change in workers and take them away from exposure they will continue to get progressive fibrosis, cancer of the lung and mesothelioma, probably at an undiminished rate; bearing in mind that the 'incubation period', if you can call it that, of cancer of the lung is 25 years, and of mesothelioma is about 40 years. The dose required for each is the dose that they get at the beginning of their exposure period. The real true value of radiographs is to tell you at an early stage whether your protective measures are adequate or inadequate; for this purpose, there is no point in taking radiographs more often than every two years.

Dr F. F. P. Kierans (Belfast): Is there any test procedure to be followed to confirm a diagnosis of chest disease due to flax dust?

Dr P. C. Elmes: The diagnosis is based entirely on the history; radiological change is unreliable and as yet we have got no reliable serological method of antibody diagnosis.

Question: What use is a spirometer in general practice?

Dr P. C. Elmes: I would have said "No use at all". It only tells you exactly what the patient tells you, that is, that he is breathless or not breathless. However, it has one value in the management of chronic wheezy chests in that it tells you whether or not you are achieving satisfactory control of the bronchospasm; your treatment usually has to fall short of complete symptomatic relief, and what you aim at is as much relief as you can get without dangerous overdosage effects of either the steroid or whatever it is you are using. If you take repeated spirometer tests of vital capacity and fast expiratory volume, this will tell you whether you are still achieving a reasonable symptomatic response. Patients tend to get discouraged if you leave them on one treatment, and in order to prevent them from asking you for bigger dosage or changing on to a more toxic drug, you can say to them: "Look, your spirometer test shows that you are getting on just as well as you were last year; stop fussing".

Dr W. M. Loughridge (Carrickfergus): Will Dr Cardoe please enlarge on how early treatment should begin in rheumatoid arthritis after the diagnosis has been made, and what influence the choice of treatment will have on these early cases? Does making an early diagnosis have any influence on the progress of the disease or on the welfare of the patient?

Dr Cardoe: This is a subject for a symposium in itself on the treatment of early rheumatoid arthritis, but I would say that the first and most vital therapy is rest during this early stage. Patients should be put to bed during the acute inflammatory stage, with rest for the body and rest for the individual joints, splinted in the right position. Drug therapy should probably start with aspirin and further treatment will depend on progress, bearing in mind the contraindications to aspirin and to the other drugs such as phenylbutazone, oxyphenbutazone, gold, etc.; but adequate rest is the first thing until the joint inflammation has settled. I personally regard the early rheumatoid cases as an indication for early admission to

hospital. This is partly because we can give them rest and there is evidence from Edinburgh that if these people go into hospital early, the ultimate prognosis is improved. However, you must remember that 50 per cent of cases of rheumatoid arthritis spontaneously remit, and may remit for 20 or 30 years. The chances are that there will be 50 per cent of remission no matter what you do to them. I do not think we alter the ultimate outcome of the remainder at all, as far as progress of the disease is concerned. This is a terrible confession, but we do probably help the patient to face up to the disabilities he is going to suffer from the disease; and this may do as much good as the drug therapy.

Chairman: It just shows how difficult it is to measure the effectiveness of any treatment in a condition like rheumatoid arthritis.

Dr J. J. Doherty (Enniskillen): Approximately what percentage of cases of carpal tunnel syndromes become rheumatoid disease? Is hydrocortisone injection treatment of this syndrome preferable to surgery?

Dr Cardoe: Carpal tunnel syndrome is such a common condition, not only in rheumatoid arthritis but in diabetics, in patients with myxoedema and in the obese, that I have no idea what proportion go on to true rheumatoid arthritis. Hydrocortisone injection is certainly worth using; about 50 per cent will respond to it for a certain time. Splinting of the wrist joint is probably a better way of dealing with it, a simple night splint often helps. Surgery will always help partly because of release of tension on the nerve, and partly because 'boggy' rheumatoid tissue is removed. Considering the sort of tissue you are dealing with in the rheumatoid, hydrocortisone injection has a big job to do. We tend to use splinting first, hydrocortisone injection second; and for guaranteed relief, surgery.

Dr Redman (Warrenpoint): Would Dr Connolly have the courage to withhold antibiotics in an influenza epidemic in an average rural practice?

Dr Connolly: Let me say, first of all, that I have worked in an average rural practice, so I have some idea of the difficulties. I would have the courage to withhold antibiotics—with qualifications. Now the first qualification is that if you know or if it was obvious that a particular strain of influenza virus was causing a lot of trouble with development of staphylococcal pneumonia, then you would be obliged to use antibiotics. The second qualification is that if you were dealing with old people, particularly old people with chronic chest disease, and if their sputum changed from mucoid to purulent, then you would use antibiotics. Otherwise I see no point whatsoever in treating adults suffering from uncomplicated influenza with antibiotics which have no effect on viruses.

Dr G. T. C. Hamilton (Belfast): Can you suggest a method by which early warning of virus disease prevalent in the community can be given to general practitioners?

Chairman: The Ministry have been very interested in this problem over the last few years, and there has been a lot of co-operation with general practitioners—although not enough. We requested that we be informed of the earliest cases of influenza diagnosed in general practice. We also thought that we could get an early indication of the onset of influenza epidemic by looking at school absenteeism, because if the virus strain

was an old one in the community, the most likely people to get it would be the small children who had not previously been in contact with this particular strain. I would like to ask Dr Baird what happened as the result of the request for data, so that we could inform general practitioners? May I ask you Dr Baird to speak not as a representative of the Ministry but just as yourself?

Dr Baird: We looked at this question last winter to see if we could predict and issue an early warning. What happened was that we had an outbreak up in Londonderry which was not actually influenza but a heterogeneous collection of virus infections and it rather 'foxed' the issue for us. We got specimens, but we did not get anything out of them. This is a problem that we would very much like to solve. If we could predict influenza and warn our general practitioner colleagues, we would be serving them better than perhaps we do at the moment.

Chairman: As far as the bacterial complications are concerned, I think the only thing to do is to get in touch with your own laboratory. It should have the data on which staphylococci or *Haemophilus influenza* strains are going round and they should also have the very important data on the sensitivity of the particular organism to antibiotics. So you will really know that what you are using for the bacterial complications will be effective in these cases.

Dr Elmes: I think this is a part of what we have to do, namely, to integrate general practice with the local hospital services and the local hospital laboratories. Ward clinicians should be the people to act as intermediaries between the general practitioner who picks up the first case and his colleagues; the hospital makes the precise diagnosis and it is up to the hospital to tell the general practitioners in the area. If the services in that area are integrated this information should pass very rapidly with no particular machinery; one does not need the Ministry of Health to issue epidemiological bulletins each week to do this.

Dr D. R. Lewis: What is the best anti-influenzal vaccine to use and when?

Dr V. G. Doyle (Dublin): Does influenza vaccine confer any general viral immunity in addition to the immunity to the virus included in the vaccine?

Dr Connolly: The best vaccine to use has not yet arrived, but there are some indications that a very good vaccine will be available in the next year or two; this vaccine is not made of complete viruses but of broken up viruses. However, of the vaccines now in use I would advise an aqueous type. While the risk of using an adjuvant type vaccine is very small indeed, some complications have been reported and include sterile abscesses at the site of inoculation, which may persist for many months. Another risk, which is theoretical, is that associated with the injection of an irritant adjuvant into muscle, namely, neoplastic change at a later date.

Question: Is there any general immunity conferred by giving influenza vaccine?

Dr Connolly: No. The whole point of the World Health Organization influenza detection scheme is that you in general practice will see the first

cases of influenza, will send specimens in to the virus laboratory and by so doing enable new strains to be picked up and notified to central laboratories quickly. An influenza vaccine protects only against the strains of virus which are in the vaccine; it will not protect against new strains of influenza virus which may arrive on the scene.

Dr N. G. Metrustry (Belfast): What causes the signs and symptoms in the 'influenzal-like' illness from which no virus can be isolated?

Dr Connolly: I presume you are referring to the recent outbreak of influenza-like illness in Londonderry. There are many viruses which cause influenza-like illnesses. We have had experience this year with influenza-like illnesses which were caused by Q fever. An influenza-like illness may arise in any viral or rickettsial disease where there is a systemic infection, that is, an infection involving many organs of the body, in particular the respiratory tract.

Dr A. S. Boyd (Hillsborough): A farmer, 38 years old, complains of morning stiffness of the hands for ten years. Full investigations by competent rheumatologists are all negative; there are no more complaints. Mother has had rheumatoid arthritis and this patient wants to be assured that he is not going to become like his mother. In view of the lack of progress in symptoms in a period of ten years, can I give him this assurance?

Dr Cardoe: This group of patients related to rheumatoid arthritis, is very interesting; many fall into the class of psychogenic rheumatism, much as one hates this term. This group of people have a constant fear of becoming like a relative, and often you cannot reassure them. If I get them, I radiograph their hands and feet and do a blood test, sedimentation rate and R.A. slide test; if these are all negative, I repeat them after six months, and if they are still negative I just reassure the patient he has not got rheumatoid arthritis and is not likely to get it. I should have thought that in ten years he would have shown positive radiographs or blood tests if he had been suffering from rheumatoid arthritis.

Dr Sandra Wylie (Carrickfergus): At what age does the sweat test become positive? Can this be done at birth when the mother of a previous fibrocystic child is anxious about producing another one?

Dr Elmes: Yes, with this test it is easier to differentiate fibrocystic disease from normal in infancy and childhood than it is in the adolescent and the adult, because the sweat electrolyte levels progressively rise in the normal to a figure approaching the levels in fibrocystic disease in infancy. If the child is apparently all right at birth—not suffering from meconium ileus or any of these horrible things—there is no point in making a diagnosis until the child is older, say two or three years old, so I think that in a way this question is unnecessary. The sting in the tail of this question, however, is that a mother of a fibrocystic child is anxious about producing another one. What you really want to know is whether the child has fibrocystic disease while it is still *in utero*, because of the meconium ileus risk. This is where we need to know a little bit more. I am sure it is going to be possible in the near future to detect these *in utero* and to be ready for them. Testing can be done in ten days or so after birth, and it is easy.

We have only a few figures—but I am sure the iontophoresis test could be done on newborn babies.

Dr P. J. Porteous (*Co. Fermanagh*): Please elaborate on early signs and symptoms of infantile viral bronchiolitis. Are there any definite warning signs which would indicate early hospital admission?

Dr Connolly: The onset could not be more sudden; it can occur within half an hour. The first thing the mother notices in the child is difficulty in breathing. There is a very characteristic cough which I am afraid I cannot describe to you, but once heard it is never forgotten. Cyanosis is an indication for early hospital admission.

Dr S. O'Connor (*Oranmore, Galway*): Two of the speakers mentioned anaemia. My estimations of haemoglobin concentration mainly in pregnant women, often differ considerably from those made in hospital for the same patient very shortly afterwards. Can an explanation of this disparity be suggested? (I use a Spencer electric haemoglobinometer and I believe that my hospital also uses one).

Dr Cardoe: I don't know how much difference there is, but I should say anything up to ten per cent was an experimental error.

Chairman: One reason for the difference observed may be that the laboratory is usually using venous blood and that you are probably using finger prick or ear prick blood; if the skin is not well pricked and it is necessary to squeeze around, the haemoglobin value could be low because of dilution with the tissue fluid.

Dr Shannon: Is it usual to get a very severe anaemia, such as aplastic anaemia, in rheumatoid arthritis?

Dr Cardoe: I presume you mean without any treatment or drugs having been administered. In rheumatoid arthritis, aplastic anaemia *per se* must be very rare indeed unless gold or some other drug has been given. Profound anaemia is quite common in rheumatoid arthritis, but there again not early in the disease; it tends to come on later and is often aggravated by gastric haemorrhage or something like that.

Dr Elmes: I was going to supplement that question and say "To what extent is the anaemia in rheumatoid arthritis primarily due to the disease or is it all drug-induced?"

Dr Cardoe: No, it is not all drug-induced, because quite often in rheumatoid arthritis the deficiency can be corrected up to a level of about 70 per cent haemoglobin, and I think you are probably correcting the drug-induced anaemia up to that level; over that, the anaemia is probably due to the disease.

Dr R. P. Maybin (*Co. Down*): Speakers have stressed the importance of radiography in the early diagnosis of chest disease and in the early diagnosis of rheumatoid arthritis. Does the panel agree that family doctors should be able to refer the patient direct to radiologists for opinion and x-ray diagnosis?

Dr Elmes: Yes, I think they should refer the patient early but, as I tried to stress in my talk, routine chest radiographs in the absence of symptoms are not of much value in general practice. I think it is very important

that you should have access to radiography as soon as the patient develops symptoms, and not have to wait three weeks for some house physician in the hospital to pontificate over your patient.

Dr G. H. Heron (*Belfast*): What is the cause of small painful mouth ulcers recurring frequently and resistant to local treatment?

Dr Connolly: This has been a problem of ours for some years now. Most people think they are viral; but I don't know of any evidence that they are viral in origin. The department of dentistry here has been investigating this for some time, and they are not sure of the aetiology of these ulcers either. With regard to treatment, none is entirely satisfactory.

Chairman: I think we should show our appreciation to our three speakers Dr Cardoe, Dr Connolly and Dr Elmes, for the excellent presentations of their papers and for their answers to the questions.

AFTERNOON SESSION

EARLY DIAGNOSIS OF PSYCHIATRIC ILLNESS

Dr T. E. Grant, B.A., L.R.C.P., L.R.C.S.E., D.P.M. (*psychiatric adviser, Manchester University Student Health Service*)

If diagnosis in medicine be the ascertaining of significant changes in structure and function—and it may perhaps be so described—then diagnosis takes place in psychiatry also. To be sure, here the normal is less easy to define, the changes are less amenable to description, and the structure and function with which we are concerned are less tangible than in the field of general medicine. The diagnosis of psychiatric illness is still, however, the discovery of abnormality—the finding of some change in structure and function. The structure is not a physical one, it is true, but is the structure of human personality. The function with which we are concerned is intangible, being part of the whole field of human experience and behaviour with all of its variations and individualities. The changes we are looking for are for the most part highly subjective and in large measure consist of exaggerations of 'normal' reactions, or reactions occurring in unexpected settings or situations. What is significant about them is often only that they adhere to a known pattern and that they disrupt life and activity. The line of normality may be difficult to draw accurately, and for our purpose is most