

resistant staphylococcus, which would require treatment with cloxacillin. The child should be nursed in an oxygen tent. Atelectasis calls for physiotherapy, including postural drainage, and radiological surveillance. Apnoeic attacks in a young infant are an alarming feature but seldom call for any heroic methods of treatment; the baby should be held upside down and any mucus that has collected in the pharynx must be removed. Convulsions are treated with heavy sedation and paraldehyde, phenobarbitone, or diazepam may be used; once again, the child should be nursed in an oxygen tent.

### Prevention

Specific prophylaxis with pertussis vaccines had come to be accepted as an effective procedure, and the decline in the prevalence of the disease in the decade before 1957 was generally attributed to their use. Nevertheless, by 1963 the number of notified cases had increased again, though only to about one-fifth of the previous figures. At this time it was shown that previous infecting strains of the organism had been largely replaced by the serotype 1,3—against which the vaccines then in use gave little protection. Since 1964 this situation has been corrected and all British vaccines now include strains of type 1,3. Nevertheless, other allegations have been made against the use of pertussis vaccines, particularly that they may give rise to serious reactions especially in the brain. Convulsions, various forms of paralysis, coma, collapse, and death have all been reported. Clearly, as has recently happened with smallpox, one has to set the benefits from pertussis vaccination against the incidence of reactions from the vaccine. At present in Britain there is probably a continuing indication for recommending the use of the vaccine,

though the position will obviously need to be kept under review.

Whooping cough vaccine should be given in the form of triple diphtheria/tetanus/pertussis vaccine in a course of three doses. The first dose is given after the age of 3 months and preferably at 6 months; the second dose is given six to eight weeks later, and the third dose four to six months later. No further booster dose is necessary. The hazards of whooping cough in infancy have encouraged a view that pertussis vaccination should be completed during the first three months of life. This is not the ideal time for obtaining the best immunological response and it is therefore not advised. Vaccination of the child population at the later ages recommended might be expected to reduce the attack rate on unvaccinated younger infants.

In view of the reactions that occasionally follow pertussis vaccination, the doctor should not give the vaccine if there is a previous history of convulsions. Further, if a convulsion or any other severe local or general reaction has followed the first dose of vaccine, no more should be given.

If triple antigen has been used the course may be completed using combined diphtheria/tetanus toxoid. A history of allergy in the child or in the family is not a contraindication to pertussis vaccination.

### Recommended Further Reading

- Medical Research Council, *British Medical Journal*, 1951, 1, 1463.  
 Medical Research Council, *British Medical Journal*, 1956, 2, 454.  
 Medical Research Council, *British Medical Journal*, 1959, 1, 994.  
 Ström, J., *British Medical Journal*, 1960, 2, 1184.  
*British Medical Journal*, 1965, 2, 2.  
 Ström, J., *British Medical Journal*, 1967, 2, 367.  
*British Medical Journal*, 1969, 4, 316.  
 Combined Scottish Study, *British Medical Journal*, 1970, 4, 637.  
 Kendrick, Pearl, L., *Health Laboratory Science*, 1971, 8, 194.

---

## European Counterparts

---

### Two Radiologists — Holland and Britain

FROM A SPECIAL CORRESPONDENT

*British Medical Journal*, 1973, 1, 225-226

"Normally I wouldn't ask you to use pseudonyms in your article", said Dr. van Tromp, a radiologist in a Dutch university city, "but at the moment I am engaged in a political row with our pharmacists over who should run the nuclear medicine departments and I don't want to mention names." Though he regards such negotiations as an irritant, medical politics are a constant minor feature of Dr. van Tromp's life as head of a busy service and research department. Besides day-to-day problems, such as his present fight to get a 24-hour diagnostic isotope service under the wing of his own department, every year he has to stake out a claim for his department's share of the funds allocated to the hospital and the university and consider whether he should apply to the central research fund, a scheme run by the Netherlands Government which helps special research projects. But otherwise he is mercifully free from committee work, as is his

British counterpart, Dr. Rushton-Wilson, who was emphatic that the thought of exchanging his present mix of service, teaching, and research work for the infighting associated with becoming a departmental head had always deterred him from applying for such a post.

### Training

Both Dr. van Tromp and Dr. Rushton-Wilson went into radiology with roughly the same experience—several years in general medicine (which in Dr. Rushton-Wilson's case resulted in an M.R.C.P.) followed by training in a university radiological department, and both men had spent part of this time abroad—Dr. van Tromp in Germany and Dr. Rushton-Wilson in the U.S.A. Dr. Rushton-Wilson's training had lasted six years, including time spent taking the diploma in medical radiodiagnosis and the Fellowship of the Faculty of Radiologists. Dr. van Tromp's formal training had lasted four years,

but had involved no examinations, and he agreed with Dr. Rushton-Wilson that the training in Britain was more rigorous. Did lack of examinations really matter in the end, I asked, or did the traditional British preoccupation with postgraduate diplomas actually help to raise final standards? "I'm sure that the absence of any test of competence in Holland is not a good thing for our specialty," Dr. van Tromp replied, "At present all that radiologists in training have to do is to work in an approved centre for four years and then they're virtually automatically given a certificate of specialization; this must inevitably result in lower standards than if we had some sort of assessment procedure."

### Daily Routines

Of the two radiologists, Dr. van Tromp is now the more specialized, working mainly in the university department of neurosurgery. As in Britain, Holland has now channelled work in this field into 12 regional centres, most of which are associated with university hospitals. Besides neurosurgeons and neuroradiologists the department in which Dr. van Tromp works has its own neuropathologists and neurological physician—while several neurologists working in peripheral hospitals are also associated with it, attending regular conferences and referring patients directly for investigation. Working under him in the subdepartment are four or five assistants and for most of the year also ten undergraduate students are attached to the neurosurgical department for a month at a time. They and all the doctors, technicians, and senior nurses working there attend the routine midday clinical conferences.

Dr. van Tromp usually arrives in the department at 8 a.m.—"the car journey from my home in the country is short and not stressing"—and leaves at 5 p.m. It is habit, not the overwhelming pressure of work, that stops him taking a lunch break, for he finds time to write articles, chapters in books, and contributions to conferences during working hours as well as keeping up with his journal reading.

Much of Dr. Rushton-Wilson's training and present-day work is concerned with neuroradiology—and with a first-rate scanning service in the department he is fortunate to have no major rows going on about who should run it, as has Dr. van Tromp. Even so, Dr. Rushton-Wilson's position in a busy general radiological department of a university hospital means that his work is much less specialized than Dr. van Tromp's. Along with his three colleagues he does at least half a day's service work a week—routine barium meals, angiograms, and so on—and he is on duty one week in four. Every day he attends clinical sessions, with the physicians, surgeons, radiotherapists, or specialist groups such as the haematological unit, and usually he goes to the necropsy demonstrations as well. Relatively little of his work is concerned with undergraduates, though because Dr. Rushton-Wilson's department is recognized for training radiologists he spends much of his time in formal teaching and supervising the work of registrars and senior registrars.

All this, he finds, fills his day—which lasts from 9 a.m. to 7 p.m., with half an hour for lunch—and he has to write papers and read the journals when he gets home (which is only five minutes' drive from the hospital). "I keep my life balanced," Dr. Rushton-Wilson commented "by leaving out what I consider inessentials. Newspaper reading, for instance, wastes a lot of time—one can keep up to date by listening to the radio news for five minutes. Again, medical meetings, certainly outside one's own specialty, are often non-productive: they often deal with subjects one knows about already and the conversation is desultory. By the time one has travelled there and back, the whole evening has gone. One keeps up to date from going to radiological meetings; from the journals; from the stream of visitors through this department; from my occasional visits

to other centres, in Britain and abroad, with a definite purpose in mind; and from one's bright registrars." Finally, Dr. Rushton-Wilson emphasized that when he wasn't on duty he made it a rule to keep his weekend totally free of work. Otherwise he would have felt completely swamped by it.

### Research

Both radiologists spent a whole clear day every week in research projects, which for Dr. van Tromp were mainly clinical and for Dr. Rushton-Wilson partly clinical and partly animal. Neither had any major complaints about the facilities. Dr. van Tromp was happy about the available space and equipment, and his plans for a completely new and enlarged department are likely to be put into effect within the next three years. But recently the hospital had cut the allocation to his department drastically and there was a complete stop on appointing new staff—though he hoped it was only temporary. Dr. Rushton-Wilson conceded that he had been fortunate to get a personal technician and a well-equipped, reasonably-sized laboratory—though he had to share this with another research team. His only real worry was the usual one—among British research workers: the problem of a fixed-time grant which invariably runs out before the work is complete and the amount of time then spent in raising new funds.

Dr. van Tromp was more enthusiastic about travel than his British counterpart. Holland had retained its traditional links with the Antilles, and he spent some time at the medical school there every few years. His department had also established its own connexion with one in Israel and again he visited it regularly and entertained workers from it in his own unit. But the Common Market had made little difference to his working life: he travelled to meetings and conferences in the various countries of the Six much as he had done before the E.E.C. had started. "Like many other Dutch doctors I was frightened at first that a flood of ill-trained doctors would descend on us from you know where," he said, "but in practice this hasn't happened and I don't think the politicians have ever taken much interest in Medicine so far as the Community is concerned."

Undoubtedly both men were contented with their jobs; if Dr. van Tromp had any grouse it was that the neurosurgical department was relatively isolated on the medical campus and that they had all too little contact with general physicians and surgeons. Again, possibly the status of radiology—and neuroradiology in particular, which had only one academic chair in Holland—could be higher, he thought, but these were minor points. Dr. Rushton-Wilson was also concerned at the poor prospects in academic radiology in Britain, and the effects this was inevitably having on recruitment to radiology. "I am very aware that to be able to do research on the scale that I do it and to have contact with clinicians is very unusual in Britain. Almost every radiologist is condemned to living in a basement and producing reports on a mass of films belonging to patients about whom he will know very little. Unless teaching and research are done on a much wider scale, especially in undergraduate centres, few doctors will come into radiology and it will remain the bottle neck that it now is—so that not only shall we have long waiting lists for what are really very straight forward procedures but will not be able to follow up the considerable advances in techniques which have appeared over the last few years."

But Dr. Rushton-Wilson was also at pains to emphasize that basically he was content. "Five years ago I resisted the temptation of a good academic post in the States, which would have given me all the modern equipment I want and up to 50,000 dollars a year salary," he said, "but I just don't like the way life goes on there. Today I certainly wouldn't change my present job for any other."