skill. This is a short-sighted policy because, if pathologists were to take over a functional middle-management administrative role, they would certainly destroy any remaining clinical raison d'être for their discipline.

Many large laboratories are linked through their medical laboratory scientists; and common policies of finance, training, and safety requirements, for example, depend on them, as does the very fabric on which present and future laboratory services depend. Yet the need for the present laboratory system is bound to disappear as technology advances to the stage where direct patient monitoring is possible. In between those two states, the side-room laboratory and factory laboratory must be given room to manoeuvre and develop via a changing clinical need. Medical laboratory science and its exponents will play a primary part in this development. The science of pathology will also change and the royal college and the association should therefore look ahead and develop the clinical role of the pathologist with these prospective changes in mind, rather than turn inwards on the laboratories that support their function. Tomorrow's clinicians will learn to use computers, much as they have learnt to use the telephone. Standard-diagnosis computer programs are already available for some diseases—designed by medical experts of the day.

The way ahead

The way ahead clearly indicates a continuing and increasing need for interpretive advice in the light of projected technological breakthroughs. The alternative for pathologists is a step back into the past that would make it obvious that their clinical role was finished so far as their clinical colleagues were concerned.

If pathologists wish to lead their place must surely be in the front of the laboratory facing the clinician and not buried within the technology. Medical laboratory scientists would want to follow that lead rather than compete for the same job. Sir James Howie, addressing a symposium on automation and computerisation in Stirling last year, indicated that he would look after the "medicine" if medical laboratory scientists would look after the "laboratory" side.

Reference

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Lesson of the Week

Fatal streptococcal septicaemia

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In less than one month four cases of acute streptococcal septicaemia presented at our hospitals. All four patients died, two of whom had been perfectly healthy until the onset of septicaemia.

Haemolytic streptococci may still kill previously healthy, young people despite their sensitivity to penicillin

Case reports

Case 1—A woman aged 39 years presented to her general practitioner with a mildly painful and slightly swollen left leg. She was treated with analgesics, but not with antibiotics. The following day she was brought to the hospital as an emergency, but was dead on arrival. At necropsy examination the leg was grossly swollen from knee to thigh and the overlying skin was discoloured with purple blotches, but no breach of the surface could be found. When an incision was made a large amount of watery brown fluid, in which fat globules floated, was released, showing extensive areas of necrotic muscle but no localised abscesses. There were no other abnormalities. β-Haemolytic streptococci group A T/M type 1/1 were grown in abundance from the spleen and the damaged muscle.

Case 2—A 31-year-old ambulance driver was brought to hospital in the early hours of the morning in shock. Six days before that he had cut a finger on his left hand while working on his car. Two days later it had become red and painful, and the following morning he had expressed some fluid from it. The next day he woke "feeling rough" but attributed this to the previous night's party. By evening, however, he felt very ill, developed diarrhoea and vomiting, and his neck swelled up. His throat was sore and a tentative diagnosis of glandular fever was made, and this was treated with aspirin. A rash appeared on his chest the next day and in the night he complained of feeling cold and then collapsed. He had passed no urine for 18 hours. He was deeply shocked on admission, and had a brawny swelling over the neck, left arm, and chest, and the upper part of the left chest appeared bruised. He was treated for septicaemia, and the following day blood cultures grew large numbers of group A streptococci, also T/M type 1/1. Investigations confirmed disseminated intravascular coagulation.

Although his initial response to intensive resuscitation was good, he required ventilation and developed progressive shock lung. He was also started on peritoneal dialysis for renal failure. At the time of admission his peripheral perfusion was extremely

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poor, and although this improved considerably he developed symmetrical gangrene of the fingers and necrosis of the chest wall overlying the cephalic vein. It was thought that the gangrene on the chest was secondary to septic thrombophlebitis of the cephalic system following the original infection. Intensive care and treatment were continued, but his condition deteriorated and he developed a pseudomonas peritonitis and died 12 days after the initial injury. No streptococci were isolated after penicillin treatment was started, and necropsy examination showed only the complications of disseminated intravascular coagulation.

Cases 3 and 4—The two further cases were association with predisposing conditions—hypophysectomy for pituitary adenoma in one and aplastic anaemia and renal failure in the other. Both patients died within 24 hours of the onset of symptoms. In the first case the infection was thought to have begun with a "pricked finger," and gangrene of the arms and legs developed over a few hours. The responsible organisms were a group A streptococcus T/M type 1/1 in the first case and a group G streptococcus in the second.

Comment

Haemolytic streptococci are still dangerous organisms despite their remarkable sensitivity to penicillin. This has been emphasised by recent articles recording other cases of fulminating disease in people who were previously totally healthy.[1] In three of our four cases the organisms entered through the skin, and the true nature of the infection was not suspected until septicaemia developed. Peripheral gangrene is a rare complication of streptococcal infection.[2]

References

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2 Rahal JJ, MacMahon EH, Weinstein L. Thrombocytopenia and symmetrical peripheral gangrene associated with staphylococcal and streptococcal bacteremia. *Ann Intern Med* 1968;**69**:35-43.

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USSR Letter

The quack doctor of Serpukhov

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The quality of a national health service can be assessed, to a certain extent, by the indirect or proxy measure of recourse to "healers" who lack officially recognised qualifications. In the Soviet Union the practice of medicine and pharmacy by such people is illegal, but it occurs there on a substantial and perhaps even increasing scale. In recent years newspapers have published moralistic accounts of the activities of individual quack doctors, and what follows is based on one exposé that was printed a few months ago in *Izvestiya*.[1]

A large practice

The first general point to emerge—albeit by implication—is a negative one. Ivan Antonovich Skvortsov did not live in some remote rural area where the existence of folk medicine might be explained by problems of access to trained doctors resulting from low population density and poor communications. In fact, Skvortsov's home was in Serpukhov, a town with a population of just over 100 000, located some 60 miles south of Moscow.

Furthermore, not only the inhabitants of his native town had turned to him for help. When confronted by *Izvestiya*'s two investigators, Skvortsov handed over a case containing about 400 letters written to him from a total of 58 towns and villages. The names and addresses on these letters enabled the journalists to contact former patients and obtain from them information that helps to authenticate their account of "illegal doctoring" and is rich in illuminating detail.

Probably a substantial proportion of the patients were ill educated (like Skvortsov himself) and easily duped by self-advertisement such as "I cure without fail any form of cancer, cancer of any organ." From what the journalists recorded, however, we can construct a second category, which is perhaps more interesting from the viewpoint of medical sociology. This consists of people whose confidence was only partial and whose attitudes were ambivalent. One such patient, a woman with higher education from Belorussia, hedged her bets by obtaining treatment from both Skvortsov and the Moscow Institute of Rheumatism. Another was a man being treated for endarteritis obliterans at the Vishnevski Institute of Surgery in Moscow. Dismayed at the duration and difficulty of his treatment, he took the advice of another patient there and travelled to Serpukhov. Finding that the healer could not understand his account, he came away empty handed. Despite that reverse, he presumably felt a need to persevere, and he wrote to the old man "many times." Other patients who were critical of Skvortsov's boorishness and the dirt in his house nevertheless "continued to write to the old man now and then, in the expectation of getting something."

At the "clinic"

To judge by the pen portrait, Skvortsov's reputation clearly did not arise from special qualities of tact, sensitivity, and sympathy. One former patient is quoted as describing a consulting session at the quack's house in the following words: "Dressed in

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