From the retired

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Myodil arachnoiditis
iatrogenic and forensic illness

All iatrogenic illness is fascinating. The threat of litigation apart, it engenders feelings of guilt, or of relief at near misses. When I was a neurological trainee in the 1950s and 1960s I served as the agent who injected Myodil (Pantopaque in North America: ethylidophenyl-undecanoate), or air, into the lumbar theca for the neuroradiologists, for subsequent screening of spine and head – myelography and air-encephalography. The air injections were instantly nasty, with headache, vomiting and sometimes loss of consciousness. The injection of Myodil, a viscous oil, was not painful if one was reasonably competent, but attempts to remove it after the screening could be very disagreeable, and were inevitably incomplete, and therefore not done in many centres.

Later, I myself must have referred some patients injudiciously for myelography, which became a lesser cause of future trouble after the advent of water-soluble media in the 1970s – unlike Myodil these were of course absorbed spontaneously. Subsequently, after my retirement from the National Health Service left a vacuum, I progressed from proxy-poacher to gamekeeper, and assessed some 80 claimants for compensation for supposed Myodil-induced arachnoiditis. A group of lawyers in the late 1980s had begun to trawl for victims of such arachnoiditis, and landed a welter of misery, beside a minority motivated by cupidity. From about five million Scots the lawyers were contacted by over 1000 would-be claimants, but more than half had not had myelograms, or had been exposed to other contrast media than Myodil. Eventually some 650 claimants were referred to a panel of neurologists and neurosurgeons for assessment. In the end, Glaxo, the makers of Myodil, compensated fewer than 70 of the claimants in out-of-court settlements. Doctors and hospitals were not involved in the claims – perhaps they should have been in some of my cases – but the taxpayer was, through the payment of Legal Aid to the claimants.

A mixed bag

Examining and assessing the claimants could be trying. Most were unhappy and disgruntled with good reason, but not all. Thus, a cheerful and well elderly man, who had had a successful laminectomy for lumbar disc prolapse 40 years earlier, told me that he was claiming in response to a touting advertisement by solicitors in his local newspaper. As expected, ‘bad backs’ predominated. In my first 79 claimants, there were 42 with lumbar disc prolapse, and another five with lumbar stenosis. The next largest group of 11 had had variants of cervical spondylosis, or neck trauma. There were three with multiple sclerosis, three with syringomyelia, two spinal abscesses, two undiagnosed cord lesions, and single instances ranging from clivus tumour to sacral cyst. Ten of the first 79 had what I considered predominant features of psychogenic illness. They included the most insistent clamourer for compensation who had no signs of organic disease on clinical examination, and landed a waler of misery, beside a minority motivated by cupidity. From about five million Scots the lawyers were contacted by over 1000 would-be claimants, but more than half had not had myelograms, or had been exposed to other contrast media than Myodil. Eventually some 650 claimants were referred to a panel of neurologists and neurosurgeons for assessment. In the end, Glaxo, the makers of Myodil, compensated fewer than 70 of the claimants in out-of-court settlements. Doctors and hospitals were not involved in the claims – perhaps they should have been in some of my cases – but the taxpayer was, through the payment of Legal Aid to the claimants.

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West Indies who had a lumbar Myodil study to elucidate a mild cervical cord lesion in 1975 when a blocked cervical canal was demonstrated. This block proved to be arachnoiditis at surgical exploration 2 years later – cause obscure.

Potential aggravations

The majority of the claimants that I saw had had operations – 60 out of the 79. I considered 15 of these ‘bad’ surgical cases in that they had had multiple spinal operations, or obvious postoperative complications. In many cases there were no radiological data at all, and in 16 there were records of ‘bad’ radiology. These 16 comprised complicated contrast injections, bad immediate reactions, and attempts to aspirate the Myodil not immediately but only after a long interval because of delayed symptoms. Fifteen had two, four had three, and one four separate Myodil myelograms. In the majority there were no records of any attempt to aspirate the medium.

The clinical picture

All claimants, of course, considered themselves the worse for their myelography, and complained of pain, and many had symptoms of lumbo-sacral radiculopathy. Some had signs thereof, of varying severity. As expected, one’s clinical diagnosis of arachnoiditis was often bedevilled by the underlying pathology. Three were clinical disasters, on long-term treatment with opioids. Three others had had obvious spinal cord lesions, alongside radiculopathy, due, I believed, to their myelography and subsequent surgery, rather than from their earlier presenting complaint. The worst of these was a man who had been training as a chef, aged 17, when he complained of poor fingertip sensation. Syringomyelia was suspected, and he had no fewer than four Myodil studies, with further injections of contrast on each occasion between 1972 and 1979. His lower thoracic cord was then explored by the surgeons and found to be ‘strangled’ by arachnoiditis. When I saw him he was completely paraplegic. But there was no trace of any abnormality on neurological examination of the upper limbs, and I suspected it had all started as a functional illness.

Magnetic resonance imaging

I referred 32 claimants for magnetic resonance imaging (MRI) of whom 17 were found to have ‘radiological’ arachnoiditis (Fig. 1). Twelve others had already had arachnoiditis diagnosed earlier – five by surgical exploration, and seven by radiculography. As regards clinical and MRI concordance, four regarded by me as clinically normal had abnormal MRI studies, and one who had clinical signs of arachnoiditis had normal MRI. The clinical significance of ‘radiological’ arachnoiditis has been queried in the past (Mooij 1980).

Figure 1  Sagittal T2 weighted MR scan of lower lumber spine showing clumping of the lumbo-sacral nerve roots due to arachnoiditis (see arrow).
Assessment
I advised that six claimants needed further investigation for other possible pathology. I concluded that Myodil had everything, or something, to do with symptoms of arachnoiditis in 18 of my first 79 claimants. My proportion of a positive opinion in less than a quarter tallies with the overall settlement by Glaxo in 70 out of approximately 650 cases in Scotland.

Spinal arachnoiditis and Myodil
Spinal arachnoiditis has a long history, going back to Sir Victor Horsley in 1909. Early series before the introduction of Myodil inevitably flounder in a sea of possible aetiologies – syphilis, gonorrhoea and tuberculosis were blamed in Britain (Elkington 1936). The last, tuberculosis, remains the commonest cause in India (Wadia & Dastur 1969) and in the developing world (Jenik et al. 1981). Myelography was first performed in 1921 after injection of air, and of Lipidol (Bull 1982). Myodil was introduced in 1944. While early experimental and clinical studies with Myodil did not report the induction of arachnoiditis, a very positive arachnoiditis response resulted when a mixture of blood and Myodil was injected into the spine of rhesus monkeys (Bergeron et al. 1972). Positive clinical series, with operative or autopsy confirmation of arachnoiditis, came from Davies (1956), Shaw et al. (1978) and others. Its use was banned in Sweden, and discouraged elsewhere. Practice in the UK and in North America varied in the quantity of Myodil injected, and in the policy of leaving, or aspirating, the contrast medium after screening.

I recall, long before the Myodil claims were mooted, arranging the removal of quantities of mobile Myodil from the theca of two (medical) patients that had been introduced at ‘St Elsewhere’s’ – they ceased to complain of their dysesthesia. But there had also been many who, years after myelography had fixed drops or goblets of Myodil in the spinal canal, or tracking along nerve roots, without any symptoms at all.

Envoi
All my claimants were examined years, up to 40 years, after Myodil myelography. Some had good medical reasons to complain but many had not. There is a real need for an adjective to complement ‘iatrogenic’, describing illness caused by lawyers; ‘dikegorogenic’ is etymologically right, but a mouthful. The hybrid ‘litigiogenic’ is nearly as long. Is there anything better to describe forensic illness?

At the time I enjoyed my part in an interesting exercise but I am uneasy in retrospect. Only a small minority of the thousands of claimants in the UK ended up with compensation from Glaxo after years of stress, reputedly around £13 000 each in the English cases. While Glaxo would have met the legal costs in the successful cases, in the great unsuccessful majority the costs were borne by Legal Aid funded by the tax payer. The least costs must have been the experts’ medical fees, prearranged in Scotland at between £120 and £180 per claimant, £400 in England. Extrapolating from my 30-odd MRI referrals, the MRI costs throughout the UK must have been of the order of £1 million, not to mention the time taken by the Myodil claimants in the beleaguered MRI departments with already long waiting lists. And I have no notion of the legal costs.

The advent of myelography in 1921, 34 years after Horsley’s first successful ‘blind’ operation for a spinal tumour, made spinal surgery more feasible and incomparably safer. But there was ‘a price to pay’ in a tiny minority in the shape of suffering from Myodil-induced arachnoiditis, and in very many more in the guise of litigation paid for by Glaxo and the Legal Aid purse.

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References