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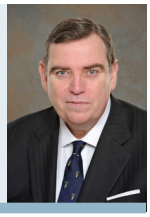

Litigation in musculoskeletal oncology

Musculoskeletal tumours lend themselves to being mismanaged. There is still a residual but unjustifiable feeling among orthopaedic surgeons that the removal of a lump is a relatively straightforward procedure. Unfortunately, if that lump happens to be a sarcoma and it is managed inappropriately the consequences can be disastrous both for the patient and the surgeon involved.

A review of the National Health Service Litigation Authority's (NHSLA) figures for the ten years between 2003 and 2012 show that 69 cases were brought. Fortunately, 44 of these were successfully defended but 25 were lost or settled, with damages per case ranging between £3000 and £951 350 and total costs per case of between £7000 and £1 104 826. The total cost to the NHSLA over this period for lost or settled cases was £2 912 541, a mean figure of £116 502 per case.

Why were these cases lost? The commonest reason was that there was a failure or delay in the diagnostic process (16 cases). There was a failure to perform the appropriate tests in three cases, a failure or delay in treatment in four, and inappropriate treatment in the other two. What was the effect on the patient? There were three resultant amputations, eight cases each of additional pain, suffering and progression of the tumour, an additional or unnecessary operation in one, and five other assorted outcomes.

There were three high claims, that is claims over £100 000. The most expensive, at £950 000, was the misdiagnosis of a bone sarcoma resulting in an unnecessary amputation. In another, costing £550 000, radiographs were lost, treatment was delayed and the patient ultimately required a distal femoral replacement for a benign tumour. The third was a case in which the diagnosis of a malignant tumour was missed, resulting in the amputation of the lower limb.

What about the cases that were successfully defended? There were 44 of these, but once again failures or delay in diagnosis or treatment accounted for 39 of them. Nonetheless, there was progression of tumour in 18, eight amputations and five cases each of increased pain and suffering, and additional or unnecessary operations.

If one considers that the incidence of bone and soft-tissue sarcoma in the UK is approximately 3000 per annum it becomes clear that 25 successful cases brought over ten years is a relatively low figure. Why is this so? Undoubtedly, one of the factors is the increasing rate of referral to specialists and supraregional centres. Another is the introduction of the "two-week wait" for potential cases of cancer. There has also been such a degree of subspecialisation in orthopaedics that 'lumps and bumps' tend to be referred to someone with an interest and expertise. Despite this, there can still be delay in the referral from general practitioner to orthopaedic surgeon, and the potential, once there, for mismanagement.

It is always worth reiterating the characteristics of a soft-tissue sarcoma. These tend to be more than 5 cm in diameter, painful, increasing in size and located deep to the deep fascia. If all four are positive there is an 86% chance of the lump being a sarcoma. Consequently, to ignore or delay the investigation and treatment of a lump with these characteristics is to open oneself to possible criticism, to say the least.

Bone sarcomas can be more difficult to identify. Any hard lump should obviously be investigated radiologically, after which the diagnosis should become clear. If the diagnosis is uncertain the patient should be referred for further investigation at a specialist centre. Matters are not, however, always that simple. Osteosarcoma, in particular, can present as flitting pain around the knee or shoulder in an adolescent and be unwittingly written off as a soft-tissue strain. Its persistence should prompt radiological investigation. Provided the radiograph is correctly interpreted, a rapid referral will be made.

A further problem arises if the orthopaedic surgeon is faced with a lump that doesn't fulfil these criteria. A patient may be in pain from a relatively small superficial lump and request its removal. Sometimes, clearly, it is safe to do this if the lump can be identified with confidence. At other times it is certainly worth arranging an MRI to see if this gives additional useful information. The painful lump that is situated in the line of a major nerve trunk and from which Tinel's sign can be elicited is a tumour of that nerve until proven otherwise. Biopsy should not be undertaken for obvious reasons and the patient should be referred to a peripheral nerve surgeon with experience in these matters. Both schwannomas and neurofibromas can usually be removed with little or no damage to the surrounding nerve, provided that due care is taken by an experienced surgeon. Malignant tumours of nerve are very rare and are treated by wide excision in the same way as for other soft-tissue sarcomas, although in these cases subsequent reconstruction by grafting may be possible. It is always worth checking to make sure that the lump is not pulsatile.

What can the general orthopaedic surgeon do if faced with a patient with a sarcoma? The general rules are, after consultation with the local specialist centre, to undertake formal surgical staging which involves plain radiographs of the whole affected bone or the part of the limb containing the tumour, an MRI of the whole affected region, CT of the chest and a technetium bone scan to exclude metastatic spread. Once this is complete, the next stage is to obtain a representative biopsy of the tumour. This is more complex than it initially appears as the biopsy has to be taken in the line of the planned sarcoma excision such that the tumour and the biopsy track can be removed in one piece. For most surgeons, this is the appropriate moment to transfer the patient to the nearest specialist centre. An inappropriately placed or conducted biopsy can significantly compromise the subsequent removal of the tumour, prejudice the recovery of the patient and lead to allegations of negligence.

If a patient with a sarcoma has been investigated and treated promptly by an experienced team using recognised principles and has given informed consent to such treatment, it is most unlikely that negligence will be established and a court find in favour of the claimant. If, however, the diagnosis is missed, delayed or incorrect; if investigation is delayed or inadequate; if treatment is delayed, inappropriate or poorly executed and the patient comes to avoidable harm as a result, then there are grounds for alleging negligence. The precise outcome will depend on the individual case.

Perhaps the most important factor in the early identification of a sarcoma is for all doctors, whether general practitioners, radiologists or surgeons, to maintain a high index of suspicion. If the possibility of an underlying tumour is always kept in mind when a diagnosis is uncertain or a presentation unusual, misadventure and ensuing litigation are less likely to occur.