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COMMENTARY

Medico–legal aspects of ureteric damage during abdominal hysterectomy

All gynaecologists are aware of the risk of damage to the ureter during the course of pelvic surgery particularly abdominal hysterectomy. It generally had been held by experienced gynaecologists that ureteric damage is sometimes unavoidable and not the result of negligence on the part of the surgeon. The view expressed by Lezen and Stotler "that many ureteral injuries occur during difficult open dissection and may not be preventable even by the most experienced and skilled surgeon"[1] is one that would strike a chord with most gynaecologists. Operations for cancer, endometriosis or pelvic inflammatory disease spring to mind for it is in these conditions that the anatomy of the ureter, including its blood supply, is most likely to be disturbed. However, most hysterectomies are performed not for one of these conditions but for menorrhagia, either with or without uterine fibroids, where the ureteric anatomy is normal or nearly so. Because they are more common, ureteric damage is more commonly seen in these operations, and in the present day world of ever increasing medico–legal cases the issue of negligence in relation to ureteric damage is being addressed increasingly. Three recent cases in which a ureter was damaged during the course of an abdominal hysterectomy and in which the gynaecologist (and in the first two cases his Health Authority) was sued for negligence throws some light on the present legal view of ureteric damage.

The first case, Hendy *vs* Milton Keynes Health Authority[2], involved what the gynaecologist, an experienced registrar with his MRCOG, called a routine abdominal hysterectomy for menorrhagia. He performed the operation using a standard technique. The patient's post-operative course was complicated by a pyrexia which was thought to be due to a chest infection, and she was discharged after one week apparently well. She was admitted three weeks later with a history of urinary leakage for one week. An intravenous urogram revealed an obstructed right ureter and confirmed the urinary leak. The ureter was explored by a consultant urologist and found to be obstructed by a catgut suture encircling its lower end. The lower end of the ureter was divided and successfully re-implanted in the bladder.

The plaintiff alleged that the ligation of the ureter occurred by reason of the gynaecologist's negligence. At the trial the gynaecologist stated that he pushed the bladder down so that he could see all the way round the top of the vagina. Three senior gynaecologists appeared for the defence and agreed that this would normally be adequate to protect the ureter but that variations in the *normal* anatomy of the ureter was such that in rare cases, such as the one in question, the ureter might still be damaged despite the normal technique being followed. The gynaecological expert who appeared for the plaintiff said that the fact that the ureter had been damaged meant that the bladder had not been pushed down sufficiently at the sides even though the surgeon could see all the way round the vagina.

The judge, Mr Justice Jowett, accepted that in rare cases ureteric damage might arise even using the correct technique but preferred the view of the plaintiff's expert and found that the surgeon had made a misjudgement amounting to negligence because in the absence of pathology or other abnormality (but not apparently variations in the normal anatomy of the ureter) "a competent surgeon should make a sound visual assessment of the position of the bladder which will reliably tell him that the ureters are now in a position of safety".

The second case, Bouchta *vs* Swindon Health Authority[3], involved an abdominal hysterectomy for fibroids. The uterus was enlarged to the size of a 16-week pregnancy. The operation was performed by an experienced registrar with his MRCOG, who had been assisted and supervised by his consultant, a senior gynaecologist. At operation multiple fibroids were found to be present and the uterus was very vascular. Because of the size of fibroids, the body of the uterus containing the fibroids was removed by a subtotal hysterectomy, followed by removal of the cervix which was enlarged and vascular. Because of the blood loss at operation, the patient was given a two-unit blood transfusion. The patient's post-operative course was apparently uneventful, but four weeks later she was re-admitted as she had started to leak urine. An intravenous urogram showed one

ureter to be dilated, and cystoscopy and retrograde ureteric catheterisation revealed both a fistula and a stricture 2 cm from the ureteric orifice. A double J stent was inserted up the ureter, and this was all that was needed to heal the fistula. Follow up investigations did not reveal any significant abnormality in renal function or continuing obstruction, although this was disputed by the plaintiff's renal expert and the patient continued to complain of pain on the affected side sufficiently severe to stop her working. The development of the fistula was preceded by a pelvic abscess which discharged itself per vaginam.

At the trial the defendant's gynaecological expert and urological expert argued that the four week delay made it unlikely that there had been direct damage to the ureter at the time of the operation, while the plaintiff's urological expert argued that direct damage was not excluded by such a delay. The plaintiff's gynaecological expert said that in a straightforward case damage to the ureter is evidence of a lack of reasonable care whilst the defendant's gynaecological expert claimed that the excessive vascularity of the cervix made this operation far from a straightforward case and because of this ureteric damage could occur without negligence on the part of the surgeon.

In finding that the surgeon had been negligent, the judge, his Honour Judge Sumner, held that once the body of the uterus had been removed the operation was relatively straightforward and if, as was the case, excessive bleeding occurred it could be "managed without great difficulty by the use of swabs and if necessary sutures, and that this should be done before applying parametrial clamps." In reaching this conclusion his Lordship relied on the plaintiff's gynaecological expert who surprisingly said that a two-unit blood loss was not excessive during the course of an abdominal hysterectomy and that any bleeding from the cervix would be only "capillary oozing". Much was made by the plaintiff's barrister of the fact that the surgeon used three rather than one or two parametrial clamps to control the bleeding. The surgeon and the supervising consultant agreed that the more clamps that were used, the greater the risk of damage to the ureter, but that in this case the extra clamps were necessary because of the additional bleeding. The clamps had only been applied after first palpating the ureter. In his judgement the judge said that if a surgeon damages the ureter in the absence of a sufficient explanation this amounts to negligence. He did not think that the problems posed by the large vascular fibroid uterus constituted a sufficient explanation for the damage that occurred to the ureter in this case. Finally, the judge said that "had the consultant gynaecologist carried out the operation himself, rather than assisting and supervising his registrar, he would have had difficulty in making the findings that he did".

The third case which is likely to be the subject of appeal, Hooper *vs* Young[4], concerns an experienced consultant gynaecologist who performed a straightforward abdominal hysterectomy for menorrhagia using a standard technique. The operation notes indicated that there was nothing untoward in the operation. The patient's post-operative course was complicated by loin pain and seven days later investigations revealed an obstructed ureter but no leakage of urine. An ascending ureterogram showed a tight constriction at the lower end of the ureter and a dilated ureter above the constriction. The consultant urologist involved subsequently re-implanted the ureter into the bladder without exposing the constricted portion of the ureter.

In his judgement, Judge Sir Michael Davies accepted that non-negligent damage of the ureter might occur without indicating what the circumstances might be under which such damage would be not negligent. He further said that on the balance of probabilities in the course of a routine hysterectomy ureteric damage was more likely than not to be the result of an act or omission amounting to negligence. In this case the plaintiff's experts argued that the ureter had been encircled by a stitch intended to tie off a blood vessel to prevent bleeding or that damage had been caused by a clamp intended to prevent bleeding. The defence experts argued that the ureter had been obstructed by kinking brought about by a nearby suture. The judge favoured kinking as the most likely explanation but accepted the submission of the plaintiff's counsel that whatever the explanation, the obstruction would not have occurred but for error amounting to negligence on the part of the defendant.

The importance of these three cases, in each of which the damages plus costs are likely to have been in the excess of £100,000, is that increasingly it appears to be the legal view that most, if not all, ureteric damage is due to negligence on the part of the gynaecologist involved. An error of judgement is not likely to be treated, as Lord Denning proposed in the Court of Appeal, "We must say and say firmly that in a professional man an error of judgement is not negligent"[5]. Lord Fraser commenting on this statement said he thought Lord Denning had meant to say "not necessarily negligent". It is clear that, the Bolam principle notwithstanding, ureteric damage during hysterectomies is close to being judged on the basis of *res ipsa loquiteur*. This may be fair in relation to the uncomplicated operation and most gynaecologists would agree with Symmonds[6] that in these operations the continuing high incidence of ureteric injury is deplorable. Clements[7] is equally firm that in the uncomplicated operation where the

anatomy is normal there is seldom an excuse for damage to the ureter. Both these authors agree, however, that injury cannot always be avoided in circumstances of difficult surgery, although neither define precisely what difficulties make damage unavoidable and therefore non-negligent.

It is this question that needs to be answered in the courts. If there are situations where utereric damage is unavoidable, and most gynaecologists would hold to this view, then this needs to be clearly established in case law. Otherwise, every defendant in a ureteric damage case will be faced by one of the small number of 'experts' who are prepared to say that ureteric damage *per se* is evidence of negligence on the part of the gynaecologist. Where the operation has been described in the notes as being uneventful and particularly where there is any delay in making the diagnosis, the defence is always likely to fail but when the case is complicated, especially by excessive bleeding, it should be possible to refute such 'expert' evidence. The problem for a successful defence may be compounded by urological expert evidence which is often overly critical. Although urologists have to repair the damage, they rarely have any experience of performing difficult hysterectomies so cannot be expected to understand fully the problems the gynaecologists may face. This does not prevent some urological 'experts' from expressing criticism of their gynaecological colleagues. Riddle[8], a urologist writing about ureteric damage, states that in our legal system it is the doctors who decide what is acceptable not the courts. This view in relation to ureteric damage may now be questioned for it seems the courts decide on the basis of evidence from 'experts' who for whatever reasons express the view that ureteric damage can always be avoided and not to do so constitutes negligence. Until a more balanced consensus view is accepted the prospects of a successful defence in cases of ureteric damage on the evidence of the three cases quoted above seems remote.

The implications in practice are clear. Gynaecologists should do all the things that textbooks tell them to do to avoid ureteric damage and record in detail themselves in the operation notes that they have done so. A hysterectomy is rarely totally lacking in complications of one sort or the other, so any deviation from the strictly normal should be recorded. The use of the words 'uncomplicated', 'straightforward', 'routine' and 'uneventful' in the operation notes should be avoided not because they may not apply to individual operations but because if they are used, they will hamper any chance of a successful defence if ureteric damage occurs. Gynaecologists must always check both ureters carefully—not as easy sometimes as some writers and 'experts' would have us believe—in any case where the operation has been difficult and record in the notes that they have done so. It may be prudent not to operate on patients who are excessively obese with large vascular fibroids or to opt for the subtotal operation. It would also be best in view of Justice Sumner's ruling to exercise extreme care when supervising registrars doing difficult cases since this too would seem to mitigate against a successful defence. When supervising a registrar in this situation consultants should be prepared to take over the operation themselves and record in their notes precisely when they did so if they consider a ureter is at particular risk. The use of a transluminating ureteric stent has been found to be helpful[9], and a subtotal hysterectomy has considerable advantages whenever the removal of the cervix looks likely to prove difficult. It may be that this operation should be the operation of choice in 1996, although it would be sad if its revival was brought about solely for medico-legal reasons. Had the gynaecologist in the Bouchta case abandoned the operation before attempting to remove the cervix, the ureter would probably not have been damaged but like most senior gynaecologists he believed that the subtotal operation was an admission of failure and that it was wrong to leave the patient with a cervix that might create problems for her later life.

In all three cases quoted above the diagnosis of ureteric damage was delayed, and although the post-operative course of the first two cases was thought to be uncomplicated, careful post-operative notes of an examination for loin tenderness by the surgeon involved and an accurate recording of the urinary output were not features of the clinical notes, as they should have been. Nor were any explanations given to the patient about what went wrong clearly documented. In the third case, the patient's complaint of severe loin pain was apparently ignored initially. Early post-operative diagnosis of ureteric damage, if this has not been diagnosed intra-operatively, will probably not stop the patients suing since if they are on legal aid they have little or nothing to lose but will indicate the appropriate standard of care to which all gynaecologists should aspire.

Since writing the above, the appeal in the third case, Hooper *vs* Young, has been heard before Lords Justice Stuart Smith, Waite and Otton[10]. It was agreed that encirclement of the ureter by a stitch or inadvertant clamping could arise only if there had been negligence but that damage to the ureter due to kinking secondary to a stitch being placed in an adjacent structure could arise without negligence. The original trial judge, Sir Michael Davies, had accepted this proposition but then went on to accept the patient's counsel submission that the kinking would not have

occurred without some error on the part of the gynaecologist. The Court of Appeal ruled that Sir Michael had applied the doctrine of *res ipsa loquiteur* inappropriately and overturned his judgement. This finding does give some hope of a successful defence in cases of ureteric damage in complicated cases but the conflict of legal views it exposes emphasises the need to avoid ureteric damage at all costs if legal action is to be avoided.

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