SCLEROTHERAPY WITH AQUEOUS PHENOL FOR OUTPATIENT TREATMENT OF HYDROCOELE AND EPIDIDYMAL CYSTS

Pages with reference to book, From 159 To 160

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A high rate of complications of scrotal surgery, alongwith a need for anaesthesia and long waiting lists, make outpatient sclerotherapy a very attractive alternative for the treatment of cystic scrotal swellings. Aqueous phenol is easily available and cheap. This study was conducted to assess success rate in our hands as compared to others.

PATIENTS, METHODS AND RESULTS

Forty new patients, between June, 1985 to June 1989 were treated of first outpatient consultation with this method. Age range was 29 to 80 years, with 75% between 60 to 65 years. Twenty patients had hydrococle and twenty epididymal cysts. Three patients had bilateral hydrocoelc. Volume range was hydrocoele 100 to 1450, epididymal cysts 25 to 770 mls. Any suspicion in the history or on post aspiration examination was an indication for an ultra.sound examination and patients were excluded from the study (two patients). In the earlier part of the study, lignocaine cord block was used. However in the latter part of the study no anaesthesia was used. Transcutancous aspiration was performed with 18 FG plastic intravenous cannula avoiding scrotal blood vessels. Plastic cannulac avoid accidental dislodgement during and post-aspiration examination. A 50 ml syringe or a three way stopcock with extension tubing for larger volumes was used. After aspiration any remaining fluid was gently squeezed out and the testicles carefully examined. 3% aqueous phenol was then instilled into the tunica. Volume of aqueous phenol varied with the size of lesion as per study by Nash[1]. Some patients felt a sharp stinging feeling lasting for less than a minute. All patients returned to their daily routine straight from the clinic. Initial follow-up was every eight weeks and subsequently between nine months to four years. Failure was defined as clinically palpable lesion after three instillations. Apart from children and young adults, two more patients were excluded from the study with a diagnosis of secondary hydrococic. Ultrasound evaluation was not used routinely. Three out of forty patients failed to respond and were offered surgery. Surgery after scierotherapy is not unduly difficult.

TABLE. Volume aspirated vs volume instilled.

Aspirate	3% aqueous phenol instilled
50 ml or less	05 ml
51-200	10 ml
201-400	15 ml
Over 400	20 ml

Eleven of the patients only required one instillation. No recurrences have occurred in thirty seven patients treated successfully over a follow-up period of between nine months to four years. There is no way of predicting response although it appeared that larger volume lesions required more instillations. Two significant complications included an early recurrence of a large inflammatory hydrocoele following first instillation for a 700 ml hydrocoele. This was treated by aspiration and antibiotics with complete resolution over five days. No further fluid was collected during a year long follow-up. In another patient a scrotal exploration was done following a failed scierotherapy. At operation the tunica was covered with thick fibrinous plaques. Testicles were normal. Hydrocoele was treated with sac excision and eversion. Eight months later, after apparent cure of hydrococle, the patient returned with an epsilateral scrotal mass. Orchiectomy specimen showed infilteration with anapla.stic carcinoma which at the postmortem was found to be part of carcinomatosis from a bronchial primary. Only other complication was a transient haem atosperm ia.

COMMENTS

Sclerotherapy for hydrocoele is not new. A variety of different chemicals have been used for scierotherapy. In the thirteenth century ginger and sugar were used. Port wine and a combination of port wine with a dccoction of rose leaves have been used in the eighteenth century with apparently good results[2]. Recent and relatively safer agents include aqueous phenol[1-3]. sodium tetradccyl sulphate[4]. ethanolarninc olcate[5] and tetracyclinc[6-8]. Phenol, chemically carbolic acid has also antiseptic and local anaesthetic properties in very low concentration. Nash1 reported a 95% cure rate for hydrocoele and a 100% success for cpididymal cysts with aqueous phenol; however in five years, 4 out of 24 patients had recurrence. MacParlane reported a 100% cure rate for hydrocoele in an average of a year long follow-up[4]. Bodker claimed a 90% cure rate with tctracyclines[6] whereas Radenoch obtained only 33% cure rate[7]. Hellstrom obtained 97.5% cure for hydrocoele hut very poor results for epididymal cysts with ethanolamine oleatc[5]. Complications in all its variety and incidence compare very favourably with surgery[2]. There is a high incidence of pain and dragging discomfort in groin and iliac fossa with tetracycline[6]. All the patients treated with cthanolaminc oleate required oral analgesia[5]. In the same series 9 out of 40 patients had pyrexia. Pain was remarkably uncommon in our series and a short lived sting was the only pain reported. This is perhaps not surprising in view of the local anaesthetic properties of phenol. Haematomas and epididymo-orchitis have been reported but in our series no haematomas occurred. One patient with a transient haematospermia was treated with anti-inflammatory drugs. Technique of instillation is probably as important as the chemical used in the success and prevention of complications. Puncture of the highest point avoiding blood vessels using plastic cannula to avoid dislodgement, complete aspiration, adequate dosage and avoiding compression all contribute to a successful outcome. Long term effects of sclerosants on testicular tissue are not known. In view of this and a theoretical risk of a patent process vaginalis in children and also possibility of a chemical epididymitis causing obstruction, sclerosing treatment should not be offered to children and young adults.

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