EXC1SION OF A GANGLION

Pages with reference to book, From 115 To 116

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A ganglion is a lump formed by myxoid degeneration of fibrous tissue. It usually arises in close vicinity of joints from the joint capsule or tendon sheaths, but contrary to popular belief, it is not herniation of the synovial membrane; nor is the content synovial fluid. Ganglia can be treated by rupturing them (medical textbooks now a days are heavy) or aspiration with a needle but these methods are associated with a high rate of recurrence and complete surgical excision with a surrounding cuff of normal tissue is the most successful form of treatment, with a recurrence rate of less than seven percent. A technique of excision of ganglia from the dorsum of the wrist (by far the commonest site of occurrence) is described below, and is applicable to other sites.

Instruments Required (Figure)

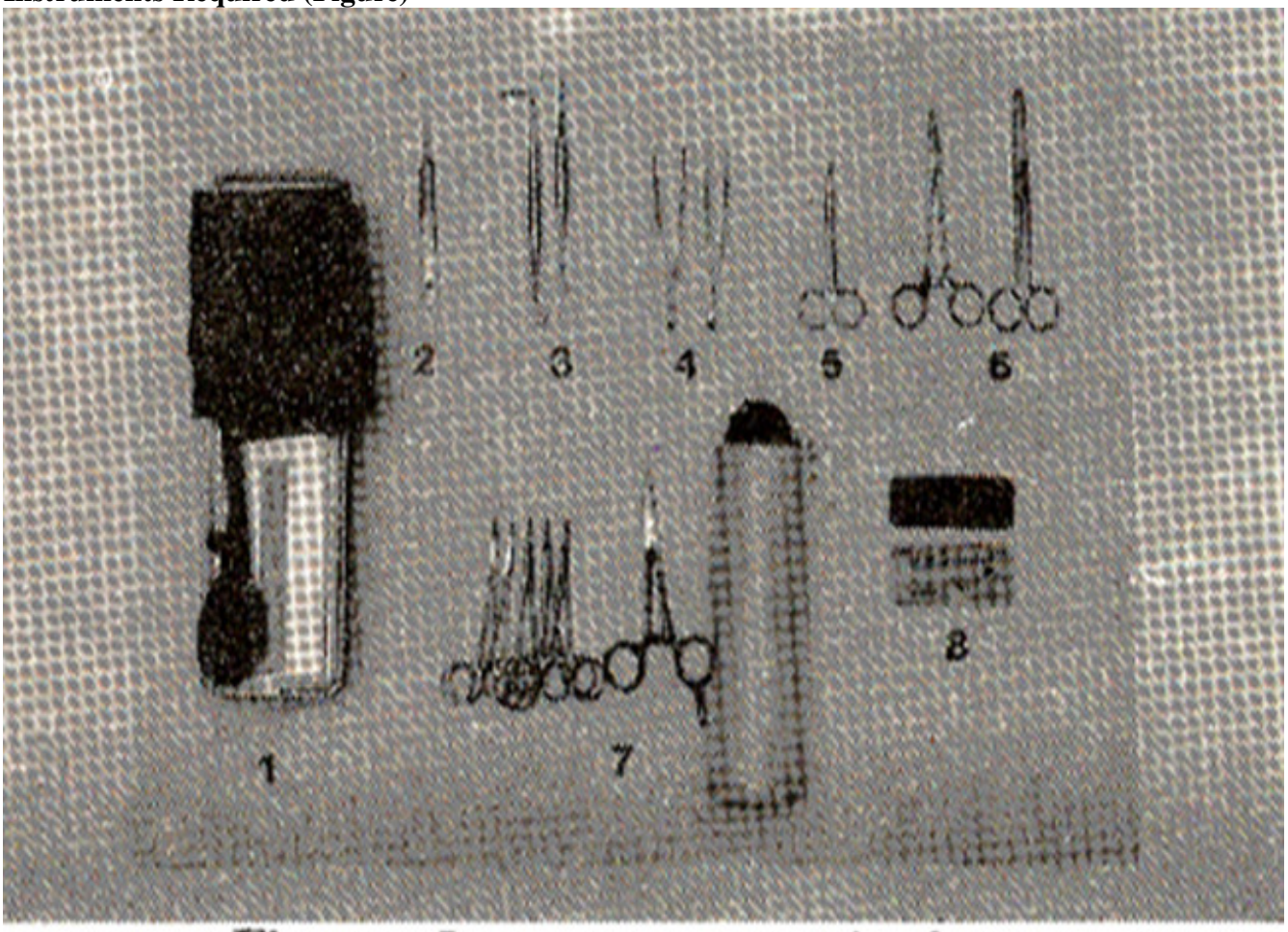

Figure. Instruments required.

1. Pneumatic Tourniquet. A good sphygmomanometer cuff, doubly secured with tape arid the pressure elevated to 75 mm over the systolic HP will do.
2. Knife handle with No. 15 blade.
3. Kjjner type retractors (Cats paws).
4. Fine foothed and non-foothed forceps.

5. Fine dissecting scissors with blunt points.
6. Small needle holder and suture cutting scissors.
7. Fine haemostats or diathermy forceps.
8. Suture material (3/0 vicryl or catgut, 3/0 prolene).
1. A toUrniquet is essential; a bloodless field is necessary for ensuring complete excision. I usually use the Bier's block technique of regional analgesia with a double cuff tourniquet. Local anaesthesia may be used but the pain produced by the tourniquet cuff pressure on the unanaesthetized arm limits its usefulness.
2. Prepare and drape the entire forearm (elbow to finder tips); the arm rests on a side table, with the operator seated comfortably. Good light is important.
3. Make a 2 cm transverse skin-crease incision over the swelling (the terminal cutaneous branch of the radial nerve is vulnerable if the incision is placed too close to the radial border). Carefully divide the subcutaneous tissue and fascia transversely.
4. The extensor retinaculum is usually quite atropic and thinned out over the ganglion; split it transversely in the direction of its fibres (it may be split longitudinally if this would allow better exposure), and retract the extensor tendons laterally or medially if necessary.
5. Expose the apex of the s*elling by care fully dividing the overlying layer of fibrous tissue until the glistening wall of the ganglion is seen.
6. Dissect out one of the poles of the swelling and carry the dissection right around the swelling. The most common error is rupturing the wall of the ganglion at this stage, which allows the fluid to escape and makes it impossible to distinguish the wall of the ganglion from the surrounding normal fibrous tissue, resulting in incomplete excision. The essential trick here is to use sharp dissection throughout with knife and scissors under direct vision. Attempts at separating the surrounding fibrous layers by blunt dissection usually result in rupture of the ganglion wall.
7. If the wall does rupture, hold it up with a haemostat and continue the dissection towards its base.
8. When the dissection all around the swelling is complete, it will be found that the base is densely adherent to the underlying fibrous tissue, usually the joint capsule. Holding up the ganglion, with a sharp knife blade held flat, shave off a thin layer of the normal tissue underlying the base of the ganglion and remove it intact. Any small remnants of the wall could be diatherniised to prevent recurrence.
9. Release the tourniquet and coagulate on ligate bleeding vessels. Use few interrupted 3/0 vicryl sutures to approximate deeper tissues. A subcuticular 3/0, prolene suture for skin leaves a pleasing scar and avoids the ugly cross- hatching associated with interrupted sutures.
10. A light wool and crepe dressing is applied, and the patient goes home the same day nursing the forearm in a sling.The suture is removed on the 10th day.