7. Simple and Subcapsular Orchidectomies (Orchiectomies)

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Indications

Orchidectomy is the removal of a testis. It may be simple or radical. The indications for simple orchidectomy are:

- Unsalvageable testicular trauma
- Severe recurrent or chronic testicular pain
- Testicular infarction (e.g., following testicular torsion)
- Part of gender reassignment surgery
- Management of prostatic carcinoma (subcapsular orchidectomy)

Procedure: Simple Orchidectomy

Simple orchidectomies are usually performed through a scrotal skin incision, but can be performed via a groin incision.

1. The most important action, before the operation, is to mark the correct operative side (i.e., right or left) and to include that in the consent form.
2. The possibility of insertion of a prosthesis should also be discussed with the patient.
3. The operation is normally performed under general/regional anesthesia.
4. Ask the anesthetist to give intravenous antibiotics at induction (e.g., third-generation cephalosporin).
5. Place the patient in the supine position.
6. Shave the scrotum and prepare the lower abdomen, penis, and scrotum with aqueous betadine or chlorhexidine. Drape accordingly.
7. Pull the testis down to relax the cremaster.
8. Grasp the scrotum around and behind the testis with the fingers and thumb of one hand and compress the testis against the anterior scrotal wall to stretch the skin over it (see Figure 6.1).
9. One of two incisions can be made (see Figure 6.2). They only need to be approximately 3–5 cm:
• Unilateral transverse incision within the scrotal folds and between the scrotal vessels
• Median raphe incision. This is our preferred incision, as it allows good access to both testis and results in minimal bleeding with a good postoperative scar.

10. Once the skin is incised, keep the testis under compression and incise the dartos muscle and the underlying cremasteric layers one by one from one edge of the wound to the other. Stop when you reach the bluish tunica vaginalis. Control any bleeding with bipolar diathermy.

11. Push all the scrotal layers away from the testis using a swab. The testis can at this stage be delivered with the tunica vaginalis and then the tunica vaginalis incised. Alternatively, the tunical vaginalis can be opened while the testis is still in the scrotum and then the testis is delivered.

12. Gently pull the testis down to expose the epididymis and cord.

13. Make sure there is no hernia in the cord. If there is a lipoma, then excise it.

14. You can put a clamp across the whole cord, but it can be thick and difficult to ligate. Therefore it is better to separate the cord into two or three parts.

15. Gently and bluntly, using tissue scissors, separate the spermatic vessels from the vas deferens. The vas normally lies anterior and the vessels posterior to it.

16. Place two clamps proximally (cranially), one above the other with approximately 1 cm between them on the vas, and one distal approximately 2 cm from the lower of the two proximal clamps.

17. Divide the vas between the distal and proximal clamps using tissue scissors. Ligate the vas below the distal clamp and remove the clamp. Then ligate the vas above the lower proximal clamp and remove it, and then ligate above the top proximal clamp and remove the clamp. 3/0 synthetic absorbable sutures can be used for ligation.

18. Repeat Steps 13 and 14 over the other part of the cord that includes the vessels.

19. The advantage of placing two proximal clamps and ligating the proximal (cranial) part of the cord twice is to avoid loss of the vessels, as they can retract very quickly and can cause a hematoma if not ligated properly. Alternatively, you can suture-ligate the vessels, with a transfixing stitch.

20. Place the testis in a kidney dish and hand it over to the scrub nurse.

21. Ensure that hemostasis is achieved before closure.

22. At this stage a prosthesis can be inserted (see Chapter 9 on insertion of prosthesis).

23. If there is infection or you are worried about bleeding, then a corrugated drain can be inserted, coming out through the most dependent part of the scrotum and fixed in place with a 2/0 non-absorbable suture and safety pin.

24. Close the dartos muscle with undyed 3/0 absorbable suture in a continuous fashion.