

## Day Case Surgery of the Testicle – Testicular Biopsy

N. H. Mbibu

*Urology Unit, Department of Surgery, Ahmadu Bello University Teaching Hospital, Zaria*

### Introduction

Testicular biopsy is a commonly performed procedure in the investigation of an infertile patient with azoospermia. Azoospermia with small testes and raised FSH levels indicate primary testicular failure and biopsy results may not be very rewarding. Vasal obstruction causing azoospermia is associated with normal-sized testis, and normal or only marginally elevated FSH levels.<sup>1</sup> Testicular biopsy may be associated with significant morbidity, including the risk of a general anaesthetic. This is a description of a day case technique done under a local anaesthetic.

### Anaesthesia: Local:

Both spermatic cords are anaesthetised, one at a time. The cord is identified by palpating it at the scrotal neck, just below the pubic tubercle. While pinching it between the thumb and index finger 2-5ml of 2% xylocaine is injected into the cord, with initial aspiration, to ascertain vascular safety. The anaesthetic is made to permeate cord structure by gentle massage with the index finger and thumb.

This procedure is repeated on the other side. Cord haematoma, a possible complication may be avoided by using a size 23 G hypodermic needle and initial injection

done more laterally than on the medial aspect of the cord. Cord anaesthesia removes the mostly nauseating pain, felt during testicular handling. The site of incision is infiltrated, with 10mls of 2% xylocaine with or without adrenaline.

### Approach

1) Transverse scrotal incision or 2) Longitudinal mid-line incision over the raphe. The raphe provides rapid access to both testes. It is bulky in tissue mass and postoperative pain is less, as the raphe does not rub on the thigh to aggravate pain during ambulation. The mid-line scar usually looks nice, and scrotal haematoma is not a regular encounter through the raphe incision. With the testes exposed, an assistant may hold it in a fixed position and a puncture incision is made on an avascular point on the tunica albuginea with a fancy Knife (No 11 blade) testicular tissue usually pops out and can be shaved with a sharp scissors or knife. Closing the tunica albuginea with a continuous 3/0 chromic stitch controls bleeding.

The tissue harvested is preserved in Bouins

---

*Reprint requests to: Dr. N. H. Mbibu, Urology Unit, Department of Surgery, A. B. U. Teaching Hospital, Zaria., e-mail: mbibu@abu.edu.ng*

solution<sup>3</sup> (Picric acid, saturated aqueous formalin 40%, glacial acetic acid 3%); formalin as a single agent destroys the histological architecture of the testes.<sup>2</sup> The testes is dressed with firm compression dressing in its dependent position.

### Conclusion

Testicular biopsy is very useful in the diagnosis of infertility patients. The technique described is painless and post-operative care has acceptable morbidity and the patient can go back to work. In our experience the dreaded scrotal haematoma was not encountered with the trans-raphé incision. Spermatic cord infiltration must be done with caution, as haematoma formation may cause lingering groin pain for a few days before resolving.

Accurate localization of vasal obstruction

is recommended as complementary to this procedure using vasography.

### Acknowledgement

Many thanks to Mr. K. R. Dasi (histopathology technologist), A. B. U. Teaching Hospital, Zaria, for supplying information about stains.

### References

1. Bullock N, Whitaker R. Male infertility. In: Essential Urology. Churchill Livingstone, Edinburgh, 1989; 344.
2. Blandy JP. Surgery of the testicle. In: Operative Urology. Blackwell Scientific Publication, London, 1978; 239.
3. Bancroft JD. Fixation. In: An introduction to histochemical techniques. Butterworths, London, 1967; 59-60.