

Testicular block using intra-testicular lidocaine: a new anaesthetic technique for percutaneous testis biopsy – Page 1568

The article on testis biopsy by Dr Jarvi, Zini and Kamal from the University of Toronto describes a novel technique of anesthesia for percutaneous testicular biopsy. They have used direct intratesticular lidocaine anesthesia instead of spermatic cord block to do percutaneous testis biopsies in 45 consecutive patients. Pathology specimens were adequate for evaluation in all patients. None of the patients complained of significant pain during the biopsy procedure and all patients could resume their normal daily activities within 3 days following the procedure. On follow-up with ultrasound, one patient developed an intratesticular haematoma that was asymptomatic and resolved completely after 4 weeks.

The role of testicular biopsies in the evaluation of infertile patients is controversial for some urologists but most would agree that it still plays an important role in the patient with normal volume semen and azoospermia, with either a normal or slightly elevated FSH, to differentiate non obstructive from obstructive azoospermia. It is also reassuring for a couple who would like to get involved in expensive advanced reproductive techniques (IVF with percutaneous epididymal sperm aspiration or testicular sperm extraction) to know that there is the presence of spermatozoa inside the testis.

The advantage of the type of anesthesia they describe is the elimination of general anesthesia or spermatic cord block. It is easily done and avoids the risk of testicular artery damage as described in 1983 by Dr. Mark Goldstein. Nonetheless, there have been very few reports in the literature about testicular artery injury using a cord block which is commonly used for many procedures like vasovasostomy and other scrotal surgeries. The potential chance of damage with direct testicular injection is low and it is well known that lidocaine has no effect on the fertility potential of the spermatozoa.

Finally, though aspiration or percutaneous testis biopsy with a Biopty gun has been described since 1982, the advantage of this technique is the ease of use, the rapidity and quick recovery of the patient. One potential setback is the possibility of an intratesticular haematoma which happened to one of the patients in the study. There is no room for expansion inside the testis due to the stiffness of the tunica albuginea. One potential danger of an intratesticular haematoma is the compression and ischemia of the intratesticular tissue. Further experimental studies need to be done to more thoroughly evaluate this effect.

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