

## **CONCLUSION & SUMMARY**

Varicocele is a common cause of male infertility. The association of varicocele with decreased testicular size, abnormal testicular histology and abnormal semen parameter is established.

The pathophysiology of the varicocele effect on fertility remains unclear. It includes renal adrenal reflux, alteration in the hypothalamo-pituitary gonadal axis, hypoxia, hyperthermia and formation of anti-protozoal antibodies.

Because the high incidence of bilateral varicocele and subclinical varicocele, scrotal duplex sonography is helpful in establishing the diagnosis especially patients with subfertility. Duplex has proved to be easy, simple, inexpensive and widely spread test.

The options of therapy may be medical, surgical or radiological. The results of medical treatment are so inferior to surgical or radiological options. Frank indications for non conservative therapy are infertility and scrotal pain however controversially issues are still present in the management of two clinical situation viz. adolescent varicocele, and asymptomatic cases showing varicocele but with normal seminal parameters is well as being free of pain.

Several surgical methods for the treatment of varicocele have been described. There are three basic surgical approaches to ligating the internal spermatic vein viz.: scrotal, retroperitoneal and inguinal.

Laparoscopic approaches also have been developed for these kinds of operations.

Surgical varicocelelectomy is the cornerstone of varicocele therapy and it is the most commonly performed operation for the treatment of male infertility. Recently microscopic varicocele ligation results in a decreased rate of recurrence and post operative hydrocele.

Laparoscopic varicolectomy is safe, effective and minimally invasive. In addition to its better cosmetic results with advantage in case of bilateral disease. It allows excellent exposure and control of the affected vessels. Furthermore the shorter hospital stay and the earlier return to normal activities are very important advantages in recommending this technique as an efficient alternative to the open surgical method.

Recently some reports claim that varicocele embolization and scrotal sclerotherapy are safe and give effective results in treatment of varicocele in childhood and adolescence. They have a low technical expense, acceptable radiation load and a very low complication and persistence rate.