

Varicocelectomy in the treatment of male factor infertility- Preliminary result of a series of 38 cases in Negara Brunei Darussalam

Chua Hock Beng

Urology Unit, Department of General Surgery, RIPAS Hospital, Negara Brunei Darussalam

Abstract

Varicocelectomy is usually performed for infertile male with oligozoospermia (less than 20 million per mm³ sperm concentration) to improve the sperm quantity and quality. This study reported my preliminary result of varicocelectomy performed over the last 5 years for infertile couple in Negara Brunei Darussalam, in which only 3 out of 35 infertile couple achieved pregnancy after varicocelectomies.

Introduction

Infertility is an increasing problem among the married couple and male factor contributes to half of these cases. Semen in the infertile couple is increasingly abnormal over the years and this has contributed to the increasing rate of infertility world wide generally [1, Dk.Hjh Rozillah et al, unpublished]. Varicocele is a common condition and can be found twice as common in the infertile group (34%) than the normal population (17%) and can cause abnormal semen analysis. Artificial Reproductive Technique such as the intracytoplasmic sperm injection technique (ICSI) enables infertile male to father a child even in the case of severe oligozoospermia or azoospermia. Varicocelectomy performed for oligozoospermic patient achieves variable success rate [2, 3]. This study is to report my preliminary result of the varicocelectomies performed for infertile male patients.

Patients and Methods

Cases of patients who underwent varicocelectomies from 1/8/2000 to 31/7/2005 were obtained from the operative registry in the operating theatre of RIPAS Hospital, Negara Brunei Darussalam. Their case notes were reviewed

carefully with respect to the age, preoperative sperm concentration, types of varicocelectomy and the end point of achieving pregnancy.

Results

Altogether 38 male patients underwent varicocelectomies from 1/8/2000 to 31/7/2005, with ages ranging from 18 to 50 years with a mean age of 26. There were 16 cases who underwent open Palomo's varicocelectomies from 1/8/2000 to 30/9/2002 and 22 cases had Laparoscopic varicocelectomies from 1/10/2002 to 31/7/2005 [Figures 1-5]. Three out of these 22 cases were performed for bilateral varicocelectomies. 10 cases had sperm concentration between 0 to 10 million per mm³, 25 cases had sperm concentration between 10 to 20 million per mm³ and 3 cases had sperm concentration of more than 20 million per mm³. Three cases were performed for pain with normal semen analysis and 35 cases were performed for infertility with abnormal semen analysis. A total of 3 pregnancies were achieved after varicocelectomies and this gives an 8.57% success rate in this preliminary result.

Discussion

This small series has shown only an 8.6% success rate. A larger series and a longer follow up are required. The success rate of this group of patients may be improved if they are given the opportunities to obtain Artificial Reproductive Techniques in the treatment of infertility.

Correspondence:

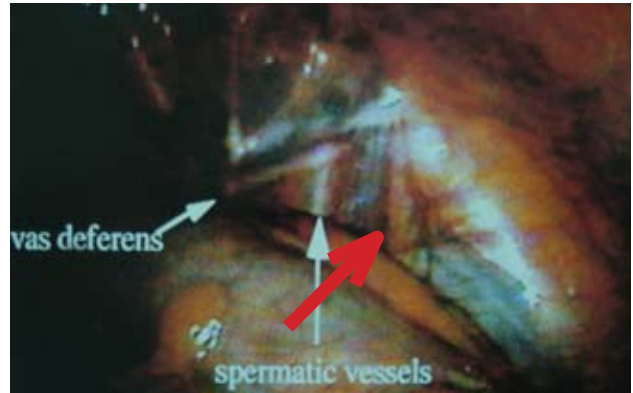
Chua Hock Beng

Urology Unit, Department of General Surgery, RIPAS Hospital,
Negara Brunei Darussalam

E mail: chuateo@yahoo.com



Left Varicocele



Laparoscopic view of varic



Dissecting and clipping of varicose testicular vein



Division of clipped varicose testicular vein



Isolated testicular artery after division of varicose testicular vein

References

1. Brugh VM 3rd, Lipshultz Li. 2004. Male factor infertility: Evaluation and management, *Med Clin North Am* 88(2): 367-85
2. Lipshultz L, Greenberg SH. 1981. The varicocele in Male subfertility. In *Gynaecology and Obstetrics*, Vol 5, Hagerstown, Md., USA, Harper and Row.
3. Greenberg SH, Lipshultz Li, Wein AJ 1978. Experience with 425 subfertile male patients. *J Urol* 119:507-510.