

# VASECTOMY: AN EXPERIENCE OF 5000 CASES

ABDUL WAHAB, MUHAMMAD ANWAR, FAISAL ALI, SYED HASNAIN ABBAS

## ABSTRACT

*A descriptive study was conducted to determine the success and complications of vasectomy done from April 2005 to April 2010 at a reproductive centre in Bahawalpur. The age ranged from 25-50 years. A total of 5000 cases were operated. Most of the patients (n 3600, 72%) were between the age of 35-45 years, 800 (16%) between 45-50 and 600 (12%) below 35 years of age. The mean operative time was 9.7 minutes (range 7-25 minutes).*

*Main reason (98%) for the patients to opt for this method of contraception was high birth rate and low income. The mean number of children of patients undergoing vasectomy was 6 (range 4-10). The most common complications were hematoma formation in 175 cases (3.5%), postoperative pain in 165 cases (3.3%), wound infection in 65 cases (1.3%) and erectile dysfunction in 55 cases (1.1%). The vasectomy failure rate (sperm persisting in semen analysis after three months) was 3.8% (n 190) while pregnancy rate was 0.2% (n 10). It is concluded that vasectomy is a safe and effective method of contraception.*

*Key words* Vasectomy, Complications, Contraception.

## INTRODUCTION:

Vasectomy is a minor surgical procedure wherein the vas deference are severed, and then tied/sealed in a manner, such as to prevent sperm from entering the seminal stream.<sup>1</sup> It can be performed by various techniques and no scalpel technique is considered better regarding wound infection and healing time.<sup>2</sup> In no scalpel technique (coin key hole) a sharp hemostat is used to puncture the scrotal skin rather than to give incision by a surgical blade. Vasectomy can be open ended in which distal end of the vas is not ligated. In this study we report our experience of vasectomy done as a part of reproductive health services.

## METHODOLOGY:

This descriptive study was carried out in Bahawalpur under reproductive health services. It spanned from April 2005 to April 2010. Vasectomy was done under local anaesthesia, and approach was made through scrotal skin at median raphe and needle was advanced parallel to the right and then left vas, within the external spermatic fascial sheath to create vasal nerve block. Left vas was isolated and brought in the midline by three finger technique. Vas was elevated further by applying ringed clamp. Scrotal

skin was pierced by dissecting forceps and it was brought out by rotating the dissecting forceps (Hooking). Vas was separated from its sheath and divided at two sites thus removing 1cm of its segments. Both proximal and distal ends were ligated by 2/0 or 3/0 chromic catgut suture. After that same procedure was repeated on the right side. Initial follow up was made 24 hours and one week of surgery to note any early complications (haematoma, infection, pain) and patient was called again after three months for semen analysis. During these three months patient was advised to use other methods of contraception as sperm may persist in the vas upto three months. Patients were also advised to report, in case pregnancy occurs.

## RESULTS:

Among the 5000 patients who came for vasectomy 3600 (72%) were between the ages of 35-45 years, 800 (16%) between the ages of 45-50 and 600 (12%) below 35 years of age. The mean age of the patients was 36 years. The mean operative time was 9.7 minutes (range 7-25 minutes). The main reason (98%) for the patients to undergo this procedure was high birth rate (the mean number of children of patients undergoing vasectomy was 6 (range 4-10) and low income to look after these kids, while the other reasons include second marriage having no intention to produce kids.

Hematoma was observed in 175 cases (3.5%), out

## Correspondence:

Dr. Abdul Wahab  
Bahawal Victoria Hospital, Bahawalpur  
E mail: doctordogar@hotmail.com

of which 16 cases (9.1%) were explored to secure the haemostasis while in rest of the cases it resolved without any intervention. In 65 cases (1.3%) wound got infected; in 30 cases it was grade II (Southampton wound-grading system) wound infection, while in 16 cases it was grade III, in 12 cases grade I and in 7 cases grade IV infection.

Significant post operative pain was reported in 165 cases (3.3%) which settled by use of non steroidal anti inflammatory drugs. Erectile dysfunction and decreased sexual desire was complained by 55 subjects (1.1%). The vasectomy failure rate (sperm persisting in semen analysis after three months) was 3.8% (n 190) and the main reason was recanalization of the vas (as revealed during revasectomy), while pregnancy rate reported in the late follow up period was 0.2% (n 10).

#### DISCUSSION:

Vasectomy is considered as the most effective and safe method of contraception,<sup>3</sup> but still a few complications can occur.<sup>4</sup> The majority of the patients who came for vasectomy were between 35-45 years of age. The mean age of the patients in study group was 36 years and it is comparable to Trollip GS et al.<sup>5</sup> The post operative haematoma formation occurred in 3.5%. Wound infection was observed in 1.3% cases while it was 4% in another study.<sup>4</sup>

It has been shown that postoperative pain can be reduced by open ended vasectomy by reducing the development of back pressure in the epididymis<sup>6</sup> but it has higher rate of sperm granuloma formation (97%).<sup>7</sup> Psychological upsets including erectile dysfunction and decreased sexual desire are also noted during follow up period. Failure to achieve contraception is reported in 0.4- 2.3% patients.<sup>5</sup> In our study it was 3.8%. This can be minimized by using fascial interposition technique<sup>8</sup> and by use of cautery in fascial interposition technique<sup>9</sup>.

Vasectomy can be performed under spinal or local anaesthesia<sup>7</sup> and pain during the procedure can be minimized by using mini needle anaesthetic technique.<sup>10</sup> In our study significant post operative pain was seen in 3.3% of the patients while the pain of varying intensity was observed in 5-35% of cases from various centers.<sup>11</sup>

#### CONCLUSION:

Vasectomy is a safe and effective method of contraception.

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