

Application of BLOODSTOP IX Absorbable Hemostatic Gauze in Prostatectomy

2004

ZHAO Kai, WANG Bin (Union Hospital)

Abstract

From 2002 till today, we have been using BLOODSTOP IX absorbable hemostatic gauze in suprapubic transvesical prostatectomy. It is used to pack prostatic bed to stop bleeding. There were a total of 35 patients in this clinical trial. Results were satisfactory. They showed that BLOODSTOP IX absorbable hemostatic gauze is not only absorbable and easy to use, it saves time, requires simple procedures, and produces satisfactory hemostatic effects.

Key words: prostatectomy, absorbable, BLOODSTOP IX absorbable hemostatic gauze

Urologists are very concerned about the problem of having hemorrhage during and after prostatectomy. Since 2002 our hospital's urology department has been using BLOODSTOP IX absorbable hemostatic gauze to pack prostatic bed in some cases of suprapubic transvesical prostatectomy. This is effective in reducing surgical hemorrhage. See report below.

Clinical Data

General data: The study consisted of 35 patients with an average age of 66 years old (oldest patient: 79 years old; youngest patient: 53 years old). All patients underwent suprapubic transvesical prostatectomy.

Preoperative examination: Residual urine volume 60-1,000 ml; average volume 169 ml (8 patients with 60 ml; 2 patients with 1,000 ml). Prostate weight 45-72 g; average weight 56.3 g.

Method: After removing the prostate, hot saline gauze was used for packing and application of pressure for about 10 minutes. 1-0 catgut was routinely used to place continuous suture from 3 to 9 o'clock positions at the lower rims of the prostatic bed and bladder neck. If the posterior lip of the bladder neck was higher, a V-shaped resection was made, followed by suture with 1-0 catgut. Meanwhile, all parts of the prostatic bed were observed for possible arterial hemorrhage in order to suture any bleeding spots to stop the bleeding. This was to prevent postoperative arterial hemorrhage. Following that, a Foley urinary catheter was placed in the bladder through the urinary tract. The prostatic bed was packed with BLOODSTOP IX absorbable hemostatic gauze, with the gauze sticking to the prostatic capsule. 20-30 ml of water was infused into the urinary catheter balloon to apply pressure on the prostatic bed. At the same time, cystostomy was performed. After the operation, furacilin solution (1:50130) was used to flush the bladder intermittently for 2-4 days.

Results: Thirty patients had clear bladder flush during the operation; 2 had clear flush 5 hours after the operation; and 3 had clear flush 24 hours after the operation. Twenty-three patients had 300 ml of blood transfusion during the operation; none of the patients had blood transfusion after the operation. Out of the 35 patients, none required surgical hemostasis for postoperative secondary hemorrhage. There were no postoperative complications (e.g. infection). Recent follow-up sessions showed no urinary stones, infection, urinary incontinence, etc.

Discussion

Today prostatic hyperplasia has become one of the common diseases and frequently-occurring diseases in our country. Many surgical methods can be used for this disease, including transurethral prostatectomy, retropubic prostatectomy, and suprapubic transvesical prostatectomy. Although transurethral prostatectomy is being used by more and more hospitals, the last two methods remain the main methods used in county, district, and village hospitals. The hemorrhage problem in operations is something urologists are very concerned about.

There are many ways to stop hemorrhage in a prostatectomy. Many scholars have been actively exploring the hemostasis methods (e.g. 5% Monsel's solution and 10% formalin solution) that are used in this operation. Although these methods have hemostatic effects, they produce urinary stones and toxic reaction (after being absorbed) easily. Other methods include the injection of absolute alcohol (i.e. inject alcohol into the prostatic bed at different spots to achieve hemostasis) and the injection of liquid medicine into blood vessels or outside the capsule.

BLOODSTOP IX absorbable hemostatic gauze is used in various kinds of operations (e.g. general operations) today. It has the advantages of being absorbable, highly hemostatic, etc. We have yet to discover its side effects. It is easy and time-saving to use it for prostatic bed hemostasis, and the procedures are simple. No complications, such as infection, have been found. Clear urine is produced shortly after the operation. In addition, this method uses significantly less flushing liquid when compared to conventional hemostasis methods. This reduces the financial burden of the patients as well as the workload of the medical staff. So far, no patients required blood transfusion after the operation. This is a simple and reliable hemostasis method. What is worth mentioning is that this method should be used on the foundation of conventional hemostasis methods. Otherwise the method will not be effective.

References

1. HE Zigao. Changes in Incidence of Prostatic Hyperplasia in the Last 10 Years. Chinese Journal of Urology, 1993; 14:425
2. WU Guotai, et al. Treatment of Prostatic Hyperplasia with Suprapubic Transvesical Prostatectomy. Chinese Journal of Urology, 1993