Does fibrin sealant decrease immediate urinary leakage following

radical retropubic prostatectomy?.

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Abstract:

PURPOSE: We determined the effectiveness of fibrin sealant in decreasing postoperative urinary

leakage following radical retropubic prostatectomy performed by 1 surgeon at Washington Hospital

Center.

MATERIALS AND METHODS: Between April and November 2003 our group treated 32 consecutive

patients with prostate cancer with radical retropubic prostatectomy. The first 16 patients (control)

underwent the Walsh described technique and the second group of 16 patients had an additional

application of fibrin sealant around the urethro vesical anastomosis. Postoperative drain output was

measured every 8 hours. The results of the 2 groups were compared.

RESULTS: The Blake drain was removed after 4 nursing shifts (times 1 through 4) in 81% (13 of 16)

of the control group and in 100% (16 of 16) of the fibrin sealant group. The fibrin sealant group had

significantly less drainage output overall compared with the control group (p = 0.005). The drainage

output from each group decreased with time at a significant rate independent of each other (p

<0.001), and there was a larger difference (p = 0.04) in output between groups at times 1 and 2

compared with times 3 and 4. There was no relationship between the amount of urinary drainage

and drain output. There was no immediate morbidity associated with the use of fibrin sealant.

CONCLUSIONS: The application of fibrin sealant to the urethro vesical anastomosis during radical

retropubic prostatectomy does decrease postoperative drain output. With earlier drain removal, patients would benefit from less discomfort and from skilled nursing requirements. In select patients early drain removal could accelerate discharge home.