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ARE THERE ANY SEXUAL DIFFERENCE ACCORDING TO SIZE OF URETHRAL CATHETER IN DOING P/Q STUDY?

Hypothesis / aims of study

The technique of synchronous pressure-flow studies requires the use of either a transurethral or a suprapubic catheter. The flow may be impaired by the presence of urethral stent . especially male rather than female, because of male have longer and narrower urethra compare to female. We evaluated the sexual differecnces of effects of urethral catheter on the uroflow during P/Q study with different size of urethral catheter

Study design, materials and methods

The two times of consecutive of maximal and average urinary flow rates of healthy volunteers of 24 males and 17 females were measured with and without 5Fr. and 8Fr. of urethral catheter. The maximal flow rate(MFR) and average flow rate(AFR) were analyzed with averages of sum.

Results

Although there was an constant decreases in MFR from 20.8 ± 6.3(ml/sec) to 20.4 ± 4.9(ml/sec) and 19.0 ± 5.2(ml/sec) with 5Fr. and 8Fr. urethral catheter, respectively, there was no significant differences of decrease of MFR according to two different sizes of catheter. And also there was no significant sexual difference of results of MFR according to size of catheter. With 8 Fr. catheter the MFR of male were changed to 18.2 ± 4.4(ml/sec) from 19.2 ± 4.6(ml/sec) and the MFR of female were changed from 21.7 ± 7.2(ml/sec) to 25.5 ± 8.8(ml/sec). The followings are correlation formulae of AFR and MFR according to diameter of urethral catheter in situ. MFR=0.79xMFR(5Fr.) + 4.71 (R square=0.37), MFR=0.74xMFR (8Fr.) + 6.92 (R square=0.32), AFR=1.00xAFR(5Fr.) + 1.48 (R square=0.35), AFR=1.23xAFR(8Fr.) - 0.15 (R square=0.59) (MFR : maximal flow rate, AFR : average flow rate).

Interpretation of results

Although there was an constant decreases in MFR with two different size of urethral catheters , there were no significant sexual difference of results of MFR according to size of catheter

Concluding message

During the P/Q study, with less than 8Fr. size of urethral stent, there were no significant changes of uroflow in non obstructed both male and female