

A RESEARCH ON PROPHYLACTIC TOLTERODINE MEDICATION IN CATHETER-RELATED BLADDER DISCOMFORT AFTER GENERAL ANEATHESIA OPERATION

Hypothesis / aims of study

To determine whether a prophylactic tolterodine medication adopted before surgical operation on non-urologic patients under general anesthesia can prevent the occurrence of catheter-related bladder discomfort (CRBD); and to assess patients' tolerance to adverse symptoms as well as the impact on related consultation work of urologic surgeons.

Study design, materials and methods

180 cases of non-urology patients who need general anesthesia operations are divided into 2 groups: 90 cases in tolterodine group and 90 in control group. The assessment of CRBD is categorized into 4 steps and statistics for adverse symptoms (dry mouth, dizziness and facial flushing) are also gathered. A record of the patients' needs for urologic surgical consultation during their reservation of catheter is also kept. SPSS 13.0 is used in the statistical analysis of data in terms of χ^2 examination and T examination, where the divergence $P < 0.05$ is regarded statistically valid.

Results

82 actual cases are observed in the tolterodine group with a 24.4% CRBD occurrence, which include 7.2% shows moderate and severe symptoms, and there are also 23 cases with dry mouth (28%), 4 cases with dizziness (4.8%), 13 cases with facial flushing (15.8%), and 1 case who needs further consultation (1.2%). In the 86 actual cases observed in control group, CRBD occurrence rate is 54.7%, with 30.2% shows moderate and severe symptoms, plus 2 cases where grim consequences occurred. 9 cases (10.5%) in control group requires further consultation. $X=19.499$, $P=0.000 < 0.05$.

Interpretation of results

The occurrence rate of CRBD on non-urologic surgery patients reaches 54.7%, including 30.2% shows moderate and severe symptoms while 10.5% is in need of further consultation. These add extras to the already heavy workload of doctors and nurses.

Concluding message

If a prophylactic medication can be enforced before CRBD, an evident reduction of CRBD rate ($P < 0.05$) could be observed with a distinct diminishing rate of moderate and severe symptoms ($P < 0.05$). Patients using tolterodine show a higher rate (48.7%) of adverse symptoms, yet to which most patients can tolerate. The prophylactic medication also significantly reduces the consultation counts of urologic surgeons.

References

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Disclosures

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