

SUMMARY AND CONCLUSION

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Urinary tract infection is a common problem associated with urinary tract catheterization. Considerable interest had been developed regarding the role of *Staphylococcus epidermidis* in the development of urinary tract infection secondary to catheterization.

Previously considered contaminants, these organisms, however are now established as the most common cause of prosthetic device and catheter related infection (*Farber and Wolff 1992*).

The aim of this work is to do in-vitro assessment of the effectiveness of the use of NSAIDs as preventive measures against catheter associated urinary tract infection caused by *Staphylococcus epidermidis*.

In the present study, 50 *Staphylococcus epidermidis* isolates were collected from the urine of catheterized patients, and identified, then they were tested for slime production and adherence with and without NSAIDs by different methods (spectrophotometric measurement of the slime layer after staining, incubation of catheter segments in organism culture and counting the organisms adhered to catheter segments, and incorporation of

NSAIDs in catheter material and study of adherence of organism in these modified catheters).

In the present study, it was found that the examined NSAIDs (salicylic acid, acetyl salicylic acid, indomethacin, diclofenac, and piroxicam) are inhibitors of both slime production and adherence of *S. epidermidis*.

From these results, it's recommended to continue the researches on coating the medical devices-including urinary catheters with NSAIDs, as well as prophylactic intake of these drugs during any manipulation involving any of these devices to decrease the possibility of infection.