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PORNPRAPA CHALEARMPORNPAISAL : RISK FACTORS OF URINARY TRACT INFECTION IN THE ELDERLY PATIENTS IN MAHARAT NAKHONRATCHASIMA HOSPITAL. THESIS ADVISORS: PRASERT ASSANTACHAI M.D., F.R.C.P., WICHAI TECHASATHIT, M.D., M.P.H., SUCHART JENKRAIENGKRAI, M.D. 109P. ISBN 974-664-323-1

This study was a case-control study and longitudinal descriptive study of elderly patients with UTI. The purpose of this study was identification of the risk factors of urinary tract infection in elderly patients who were admitted at the in-patient medical ward of Maharat Nakhonratchasima Hospital. One hundred and twenty cases and one hundred and twenty controls were selected by purposive sampling. Cases were patients with significant organisms in urine culture amounting  $10^5$  or more Colony Forming Unit /ml of urine. Controls were patients without significant organisms in urine culture. Data collection was done by interview with an adjustable questionnaire from August 1, 1999 to October 31, 1999. Five risk factors are significantly associated with urinary tract infection in elderly including chief complaints of fever or chill (OR=2.49, 95% CI= 1.33-4.67), chief complaints of urinary symptom (OR= 3.99, 95% CI= 1.39-11.46), urinary catheterization during hospitalization (OR= 2.43, 95% CI= 1.20-4.14), newly diagnosed diabetes mellitus (OR= 4.34, 95% CI= 1.53-12.31), and nasogastric tube retention during hospitalization (OR= 2.95, 95% CI= 1.47-5.90). Of those 120 cases, 65.8% of the cases had improved in clinical symptoms and were discharged from the hospital. White blood cell count in urinalysis can be used as a predictor of positive urine culture or a screening test prior to performing a urine culture. This test gives sensitivity 65.83%, specificity 71.66%, positive predictive value 69.91%, and negative predictive value 67.71%.