



Service Priorities and Programmes
Electronic Presentations

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Is mid-stream urine (MSU) essential for viability in culturing an organism in patient suspected urinary tract infection (UTI)?

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Introduction

In a busy hospital environment, nurses are always engaged in multiple tasking all the time. The process of saving mid-stream urine (MSU) is a step-by-step procedure and we cannot ensure patient are fully understand our instruction regarding MSU saving. Therefore, I wish to conduct a study to find out whether it is essential to obtain MSU in culturing urine samples. Each participant was given 2 sterile containers containing boric acid inside, they were told to save the initial-stream of urine and middle-stream of urine in two containers respectively during one voiding. The samples will then be sent to microbiology laboratory for urine culture. This study is aim to find out is there any different in culture result using initial-stream urine (ISU) and middle-stream urine in both gender.

Objectives

Improve the quality of urine samples culturing

Methodology

Usual practice in collecting urine samples remain unchanged. But we should reinforce the proper urine sample collecting method as it can decrease the contamination rate and decrease the chance of repeating urine sample, hence decrease the expenditure on extra laboratory investigation.

Result

The main outcome measure is both ISU and MSU collecting methods yielded same culture result provided that the culture growth count is significant ($\geq 10^5$ CFU/ml). Although culture result from MSU and ISU are similar in those positive growth of microorganisms, and both samples have similar results for those culture with no bacterial growth. The contamination rate is higher in ISU sample. Therefore MSU is essential for viability in culturing an organism in patient suspected urinary tract infection (UTI).