Abstracts - e-Poster Presentation (Mini-Free Communications)

Thursday, May 11th, 2023 from 16:30-18:00 ADT
Friday, May 12th, 2023 from 15:30-16:30 ADT

P-062

EVIDENCE BASED EVALUATION AND REDESIGN OF THE RENAL BIOPSY PROCESS AT WINNIPEG HEALTH SCIENCES CENTRE

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Background: Native renal biopsy is a useful tool in determining the etiology and providing clinical information in acute and chronic kidney diseases. The biopsy process has evolved throughout the years and is generally a well-tolerated procedure. Due to the vascular nature of the kidney, care must be taken to both identify and mitigate possible complications of the procedure as they can confer morbidity and mortality.

Objectives: (1) Identify guidelines and evidence-based practices which should guide renal biopsies (2) Liaising with stakeholders: develop a new renal biopsy package to reduce unnecessary testing, redundancies, and evidence-based (3) Evaluate the efficacy of the new package.

Methods: Literature review to identify best practices, established guidelines, and interventions used to pre-empt complications was completed. Data was collated and summarized in a narrative format. A process map was created to establish current practices, to identify stakeholders, and examine current forms. A novel set of forms for the renal biopsy process including pre-biopsy medication management, necessary testing, admission orders and discharge instructions was generated. Upon agreement by stakeholders, the new forms will be tested using human-factors engineering with a set of fictional patients. The package will then be implemented on a temporary basis to evaluate its performance, including successful completion rate of biopsy packages, time to completion, staff satisfaction with the new process, and unintended complications as a result of the process change.

Results: Literature review has identified (1) A target blood pressure of under 150/100 reduces bleeding complications (2) Periprocedural management of anticoagulation is largely guideline driven in the absence of randomized trials (3) An observation period of 8 hours post biopsy captures most complications (4) Evidence does not support the use of DDAVP as regular practice.

Conclusions: At this stage, the process of implementing the forms is underway, and data collection and analysis are pending.