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Poster Presentation

TITLE	**Improving the Elective Paracentesis Service in NHS Tayside**
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ABSTRACT DETAILS:	
Background:	Elective abdominal paracentesis services in NHS Tayside are run via the Clinical Investigation Unit (CIU) where ascitic drains are left in for 24 hours, requiring an overnight stay. Demand for this service is exceeding capacity with patients requiring acute admission to the Acute Medical Unit (AMU) and Gastroenterology inpatient ward for elective procedures. Prevalence of chronic liver disease is forecast to continue rising and therefore we can predict that demand for elective paracentesis will also rise. The aim of this study is to highlight ways in which our service can be streamlined to provide efficient and effective care for our patients.
Method:	Prospective data was collected over a 3 month period between October 2017 to January 2018 for all elective paracentesis' attending CIU, Ninewells Hospital. Data collected included age, sex, underlying diagnosis, time of arrival, ascitic drain insertion and withdrawal time; weight, pulse, blood pressure and bloods pre and post ascitic drain; hourly drain output, volume of albumin replaced and any complications during or post procedure. Data calculated from these values included UKELD score, percentage of total volume drained per hour, total ascitic fluid volume drained, change in weight, renal function and haemodynamic state pre and post procedure.
Results:	Over the 3 month period studied, 31 paracentesis' were performed on 15 patients. 2 paracentesis' were excluded secondary to outlying data (>1.5 IQR above the mean), both data sets were taken from the same patient. Fluid drainage rate was variable but clear differences were seen between night and day with patients draining on average only 14% of their total volume overnight (22:00-08:00) and the remainder during waking hours. Paracentesis drained on average 11,064ml in 22hrs, but the rate at which ascitic fluid drained plateaus, on average at 7 hours post drain insertion. At this time the average percentage of ascitic fluid drained is 73% (range 46%-97%). There were no significant changes in haemodynamics or renal function pre and post paracentesis. 86% of the cohort had a UKELD greater than 49 with a median value of 54.5 (range 46-60).
Conclusions:	Given the variability of ascitic fluid drainage rate we must ultimately adopt an individual approach to each patient. Currently, on average, patients are draining 73% of their total volume in the first 7 hours and have minimal drainage during the night, most likely secondary to poor nocturnal mobility. The benefits of draining the remaining 27% of fluid do not outweigh the risks or costs associated with an extra 15 hour, overnight stay with an ascitic drain in situ. We plan to audit a test of change in service to day case procedures where ascitic drains are left in for 7 hours only.
References:	1. EASL clinical practice guidelines on the management of ascites, spontaneous bacterial peritonitis, and hepatorenal syndrome in cirrhosis. Journal of Hepatology 2010 vol. 53 j 397–417 2. AASLD Practice Guidelines. Management of Adult Patients with Ascites Due to Cirrhosis :Update 2012. 3. K P Moore and G P Aithal, Guidelines on the management of ascites in Cirrhosis**.** Gut 2006;55;1-12 (BSG Guidelines)