endoscopy, or concomitant biliary, small bowel or large bowel endoscopy. Peritonitis occurred in 16 episodes (3.9%). One-quarter of cases were polymicrobial (4 episodes, 25.0%).

Antibiotics were administered prior to 185 (45.3%) endoscopy, while 343 (84.1%) episodes had concomitant use of gastric acid suppressants use: 85 (19.0%) on H2-blocker, 255 (74.3%) on PPI, 23 (6.7%) on misoprostol, 54 (15.7%) on aluminum-containing antacids, 7 (2.0%) on magnesium trisilicate. Logistic regression model showed that patient’s age, number of endoscopic biopsy, and histamine-2 receptor blocker use independently predicted peritonitis, while prior antibiotics exposure had a protective effect against peritonitis (Table 1).

### Table 1: Multivariate logistic regression on predictors of post gastroscopy peritonitis

<table>
<thead>
<tr>
<th>Odds ratio</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2-blocker use</td>
<td>3.471 (1.086 - 11.095)</td>
</tr>
<tr>
<td>Antibiotics use</td>
<td>0.230 (0.056 - 0.901)</td>
</tr>
<tr>
<td>Number of endoscopic biopsy</td>
<td>2.390 (1.279 - 4.467)</td>
</tr>
<tr>
<td>Age (per year)</td>
<td>1.081 (1.024 - 1.141)</td>
</tr>
</tbody>
</table>

H2-blocker, histamine-2 receptor blocker.

**Conclusions:** Gastroscopy is an important risk factor for peritonitis for peritoneal dialysis patients, and occurs more after in elderly or after repeated biopsy procedures. Prophylactic antibiotics and avoidance of histamine-2 blocker should be considered in high-risk cases before gastroscopy.

No conflict of interest

**POS-637**

NEW REMOTE MONITORING TECHNOLOGY IN THE TREATMENT OF PATIENTS UNDERGOING PERITONEAL DIALYSIS

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**Introduction:** Peritoneal dialysis (PD) is a modality that allows dialysis treatments to be performed at home thus promoting patient’s autonomy. Nevertheless, patients on PD still require regular visits with the nursing team to assess dialysis efficacy, as well as an active monitoring of their therapy with daily recordings of weight, blood pressure, and fluid removal. Amia with Sharesource® is an innovative cyclar that includes a graphic interface, voice-guidance and a two-way connectivity platform that allows clinicians to review treatment data from a remote location. In this pilot study, we aimed to determine the impact of Amia with Sharesource® regarding PD complications, staff’s workload and patients’ appreciation.

**Methods:** This is a prospective study conducted at CHU de Québec, the Hôtel-Dieu de Québec hospital (Canada). All incident patients over 18 years old who initiated automated PD (APD) on Amia Cycler with Sharesource® were included (June 10th 2019-March 30th 2020; AAPD group) and compared to a cohort on standard PD cycler (HomeChoice®) in the prior 2 years (January 24th 2017 – April 17th 2019; HAPD group).

Clinical data were collected from the patients’ records at baseline. Data related to catheter complications (infections, dysfunction), hospitalizations, APD failure, kidney transplantation and an appreciation questionnaire (patients’ feedback, confidence and ease of use of device through a simple 3-point survey) were collected at 3, 6, 9 and 12 months after PD initiation. Quantitative data are shown as medians with interquartile range [IQR], and qualitative data as percentages. PD complication rates are expressed as number per patient-year.

**Results:** 80 patients were included (20 in the AAPD group and 60 in the HAPD group). Patients in the AAPD group were older (66 [60-72] vs 60 [53-69]). There were more men in the AAPD group (60 vs 43%). The Charlson morbidity scores and PD cycler training time were comparable in both cohorts. In the HAPD group, 43/60 patients had their complete follow up at 12 months with a median follow-up of 11.4 months [7.8-12.2]. Six patients received a kidney transplant while 6 patients died. In the AAPD group, 8/20 completed the 12 months follow-up with a median of 4.7 months [2.8-5.8]. Until now, there has not been any deaths or kidney transplantation in the AAPD group. Mechanical and infectious complications, hospitalizations, and APD failure results are shown in Table 1. Interestingly, hospitalization rates were lower in the AAPD than in the HAPD group (0.29 vs 0.77 hospitalization/patient-year). PD complications were similar between groups while the nurses’ workload assessed by the number of calls between patients and nursing team during follow-up seemed to be lower in the AAPD group. The maximum score of 5 was obtained for the 3-points questionnaire for the patients appreciation.

**Conclusions:** Amia with Sharesource® is a promising device allowing a remote treatment review for PD patients. Our preliminary results suggest that Amia with Sharesource® have comparable PD complication rates compared to standard cycler and seems to reduce the nurses’ workload who take care of these PD patients. There seems to be a clinically significant trend towards a decrease in hospitalization rates by 2.5. Note that patients’ recruitment for this study is still ongoing.

Conflict of Interest: We have received research grants from Baxter to study this new Amia with Sharesource® technology.

**POS-638**

EFFLUENT DCR2 IS A NOVEL BIOMARKER FOR PERITONEAL FIBROSIS IN PERITONEAL DIALYSIS PATIENTS

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**Introduction:** Peritoneal fibrosis is the most severe complication of peritoneal dialysis (PD), but lack of noninvasive biomarkers for monitoring the rate of progression of peritoneal fibrosis. Decoy receptor 2(DcR2), a marker of senescence, has been used to evaluate the degree of differentiation of tumors. The aim of this study is to determine whether peritoneal effluent DcR2 could serve as a novel specific and sensitive biomarker for assessing peritoneal fibrosis.

**Methods:** 149 PD patients (PD duration>6 months) were enrolled in our unit from 2008 to 2018. Free from acute infection and recent peritonitis. The fibrosis of peritoneal biopsy tissues were detected by Masson trichrome staining. Effluent and serum DcR2 levels were measured by ELISA and effluent appearance rate (AR) were calculated. The association of DcR2-AR with clinical parameters were analyzed. Receiver operating characteristics (ROC) curve analyzed area under the curve (AUC) of AR DcR2 for assessing peritoneal fibrosis. Double staining was undertaken for DcR2 with peritoneal mesothelial cells and fibroblast marker vimentin and fibrotic markers α-SMA and FN.

**Results:** There were 75 patients with peritoneal fibrosis and 74 without. Effluent and serum DcR2 levels had no statistical difference between two groups, but DcR2-AR levels were higher in patients with peritoneal fibrosis compared with normal peritoneum. Effluent DcR2-AR levels were associated with Duration of PD, total glucose exposure, past peritonitis (%) and 4h D/P. The area of under curve was 0.74 for peritoneal fibrosis, with a sensitivity of 73% and specificity of 76%, respectively. DcR2 was co-expressed with vimentin and colocalized with α-SMA and FN in peritoneal tissue.

**Conclusions:** Effluent DcR2 could potentially serve as a novel biomarker for peritoneal fibrosis and may reflect senescence of fibroblasts in PD patients. No conflict of interest