surgery can strongly predict a higher risk of sexual dysfunction after surgery.

http://dx.doi.org/10.1016/j.pbj.2017.07.037

### PS197

# Compensatory renal overgrowth after unilateral nephrectomy in children



Krzysztofa Kopyt<sup>1,\*</sup>, Aleksandra Gauden<sup>1</sup>, Michal Ebisz<sup>1</sup>, Michal Jurczyk<sup>1</sup>, Adam Olesiak<sup>1</sup>, Piotr Soltysiak<sup>2</sup>, Wojciech Gorecki<sup>2</sup>

<sup>1</sup> Student Research Group – Jagiellonian University Medical College, Krakow, Poland

<sup>2</sup> Pediatric Surgery Clinic, Jagiellonian University, Krakow. Poland

*E-mail address:* krzysztofa.kopyt@student.uj.edu.pl (K. Kopyt).

**Aim:** The aim of the study is to investigate the intensity of renal overgrowth after unilateral nephrectomy in children's population, as well as to check dependency between kidney's dimensions and patient's age.

**Introduction:** Solitary kidney after unilateral nephrectomy tends to overgrow. In adult population the dynamic of overgrowth and maximal dimensions are identified. In childhood there are no described patterns of the process of solitary kidney overgrowth.

**Methods:** Patients who had undergone unilateral nephrectomy in the University Children's Hospital of Cracow were enrolled. The length of the solitary kidney was compared with control group which was based on ultrasound examination of the kidney (left n = 1601, right n = 1635) performed in the same clinic in children without kidney disease. All examinations were carried out with Philips Epiq 5G ultrasound unit with convex probe C5-1 MHz by a single physician (PS).

The comparison was analysed with t-student test for one or two means. 18 children (7 males) from the birth to the age of 17 who underwent in total 48 ultrasound examination after the nephrectomy were enrolled.

**Results:** There was significant difference between the mean of the kidney's length in patients after unilateral nephrectomy and control group. The difference was the most explicit in the groups at the age from 8 to 13 for the right kidney (difference range from 13 to  $22 \, \text{mm}$ , p < 0.05) and in the groups at the age from 8 to 12 for the left kidney (difference range from 11 to 19 mm, p < 0.05). Solitary kidney in children after nephrectomy is significantly larger than in the control group.

**Conclusion:** The dynamic of solitary kidney overgrowth in children should be taken into consideration while performing the sonographic examination. Chronic kidney disease may be suspected when overgrowth of the solitary kidney is not present. Further research dealing with the dynamic of compensatory kidney overgrowth in children is indicated.

http://dx.doi.org/10.1016/j.pbj.2017.07.038

Internal Medicine Plenary Session Saturday, September 16th, 14h00

#### PS067

## Cardiac effects of Ledipasvir plus sofosbuvir for Hepatitis C treatment in thalassemia



H. Karimi-Sari <sup>1,2,3,4,\*</sup>, A. Khosravi <sup>1,2,3,4</sup>, B. Behnava <sup>1,2,3,4</sup>, M. Abedi-Andani <sup>1,2,3,4</sup>, S.M. Alavian <sup>1,2,3,4</sup>

 Student Research Committee, Baqiyatallah University of Medical Sciences, Tehran, Iran
Baqiyatallah Research Center for Gastroenterology and Liver Diseases (BRCGL), Baqiyatallah University of Medical Sciences, Tehran, Iran
Middle East Liver Diseases (MELD) Center, Tehran, Iran

<sup>4</sup> Atherosclerosis Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran E-mail address: dr.karimih@yahoo.com (H. Karimi-Sari).

**Aim:** This study was designed to evaluate the effects of Ledipasvir plus Sofosbuvir on cardiac function of thalassemia patients.

**Introduction:** Hepatitis C (HCV) infection is much more prevalent in thalassemia patients because of blood transfusion. Thalassemia patients may also have cardiac abnormalities due to congenital problems, anemia, and increased burden of iron in their myocardium. HCV treatment has been revolutionized after introducing new direct acting antiviral (DAA) drugs, and data is limited about effects of these new drugs on patients' cardiac function.

**Methods:** In this study HCV-infected thalassemia patients which were selected for treatment with DAAs in HepCC-2 trial (NCT03061032) were evaluated prospectively. Fixed dose daily tablets of 90 mg-Ledipasvir plus 400 mg-Sofosbuvir (12/24week,  $\pm$ ribavirin) was prescribed for patients. All patients were evaluated by a unique echocardiography fellowship for collecting the echocardiography findings of before and after the treatment. Then effects of mentioned drugs on patients' cardiac function were evaluated.

**Results:** Thirty-two patients with mean age of  $24.2 \pm 6.4$  years were evaluated. The treatment response, which was evaluated by rapid virological response and sustained virological response rates, was 100%. The patients' left ventricular end-systolic diameter (LVESD) and volume (LVESV), global longitudinal strain (GLS) of LV and average, and right ventricle (RV) size were significantly increased after finishing the treatment (P<0.05). Changes in abovementioned parameters were not correlated with patients' myocardium iron load (P>0.05). There were no significant differences in before-after comparison of other echocardiographic parameters (P>0.05).

**Conclusion:** Ledipasvir-Sofosbuvir combination therapy was safe for our HCV-infected thalassemia patients and cause no serious cardiac events. But minimal changes in strain, size, and volume of left ventricle, and size of right ventricle may refer to needing more precise cardiac evaluations in these patients. Also, our patients' ejection fraction remained unchanged. Hence, we suggest more specific and long-term echocardiographic evaluations before and after treatment, if needed.<sup>1–3</sup>

## References

 Jafroodi M, Davoudi-Kiakalayeh A, Mohtasham-Amiri Z, Pourfathollah AA, Haghbin A. Trend in prevalence of Hepatitis C virus infection among B-thalassemia major patients: 10 years of experience in Iran. Int J Prev Med. 2015;6.