jiaps Journal of Indian Association of Pediatric Surgeons
Home Current issue Instructions Submit article

J Indian Assoc Pediatr Surg. 2019 Jan-Mar; 24(1): 79–80.
doi: 10.4103/jiaps.JIAPS_79_18: 10.4103/jiaps.JIAPS_79_18
PMCID: PMC6322185
PMID: 30686896

Interstitial Cells of Cajal and their Correlation to Outcome in Congenital Urological Abnormalities

Salvatore Arena and Carmelo Romeo

Department of Human Pathology of Adult and Childhood "Gaetano Barresi," University of Messina, Messina, Italy
Address for correspondence: Dr. Salvatore Arena, Department of Human Pathology of Adult and Childhood "Gaetano Barresi," University of Messina, Messina, Italy. E-mail: salarena@unime.it

Received 2018 Apr; Accepted 2018 Sep.

Copyright : © 2018 Journal of Indian Association of Pediatric Surgeons

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Sir,

We read and appreciated the manuscript written by Inugala *et al*.[1] in the Journal of Indian Association of Pediatric Surgeons, issue of July–September 2017. In the last decade, there has been a growing interest in the involvement of interstitial cells of cajal (ICC) in urinary congenital abnormality. In this regard, ICC play a crucial role as pacemaker of the urinary tract[2] and are actually closely associated with a variety of motility disorders and many congenital urological diseases such as vesicoureteral reflux[3] and vesicoureteral junction obstruction.[4] In particular, as in ureteropelvic junction obstruction, a loss of ICC seems to correlate with severity of vesicoureteral reflux,[3] and a significant impairment of these cells was found in congenital primary obstructed megaureter, probably due to the absence of c-kit positive muscular embryological precursors.[4] In accordance with Inugala *et al*.[1] suggestion, we believe that it would be useful to investigate the density of ICC in the resected margin of surgical samples after ureteral reimplantation for both vesicoureteral reflux or vesicoureteral junction obstruction, to investigate if there is a correlation between ICC density and postsurgical prognosis. These studies, where appropriate, might also be useful for presurgical identification of the abnormal ureteral segment and the adequate extension of resection. Finally, we would like to congratulate the authors for their work and suggestion.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Inugala A, Reddy RK, Rao BN, Reddy SP, Othuluru R, Kanniyan L, et al. Immunohistochemistry in ureteropelvic junction obstruction and its correlation to postoperative outcome. J Indian Assoc Pediatr Surg. 2017;22:129–33. [PMCID: PMC5473296] [PubMed: 28694567]

2. Di Benedetto A, Arena S, Nicotina PA, Mucciardi G, Galì A, Magno C, et al. Pacemakers in the upper urinary tract. Neurourol Urodyn. 2013;32:349–53. [PubMed: 23002060]

3. Arena S, Fazzari C, Arena F, Scuderi MG, Romeo C, Nicòtina PA, et al. Altered 'active' antireflux mechanism in primary vesico-ureteric reflux: A morphological and manometric study. BJU Int. 2007;100:407–12. [PubMed: 17532859]

4. Arena F, Nicòtina PA, Arena S, Romeo C, Zuccarello B, Romeo G, et al. C-kit positive interstitial cells of Cajal network in primary obstructive megaureter. Minerva Pediatr. 2007;59:7–11. [PubMed: 17301719]

Articles from Journal of Indian Association of Pediatric Surgeons are provided here courtesy of **Wolters Kluwer -- Medknow Publications**