

# OCCURRENCE OF URINARY TRACT INFECTIONS AND URINARY TRACT MALFORMATIONS IN AGED 0-3 YEARS CHILDREN WITH UROLITHIASIS

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## INTRODUCTION

Recently, growing incidence of urolithiasis in children, including very young ones, is observed. There are numerous causes of that fact, among them climate changes and epidemic of obesity. However in youngest children their significance seems to be not so important. The knowledge about etiology of urolithiasis in very young patients is limited. About 75% of them present metabolic abnormalities leading to stone formation. It is possible that urinary tract infections (UTI) and malformations of urinary tract (MUT) causing urine retention are the reason of stone forming.

## AIM

The aim of the study was estimation of frequency of urinary tract malformations and urinary tract infections in children with urolithiasis diagnosed at the age of 0-3 years (y).

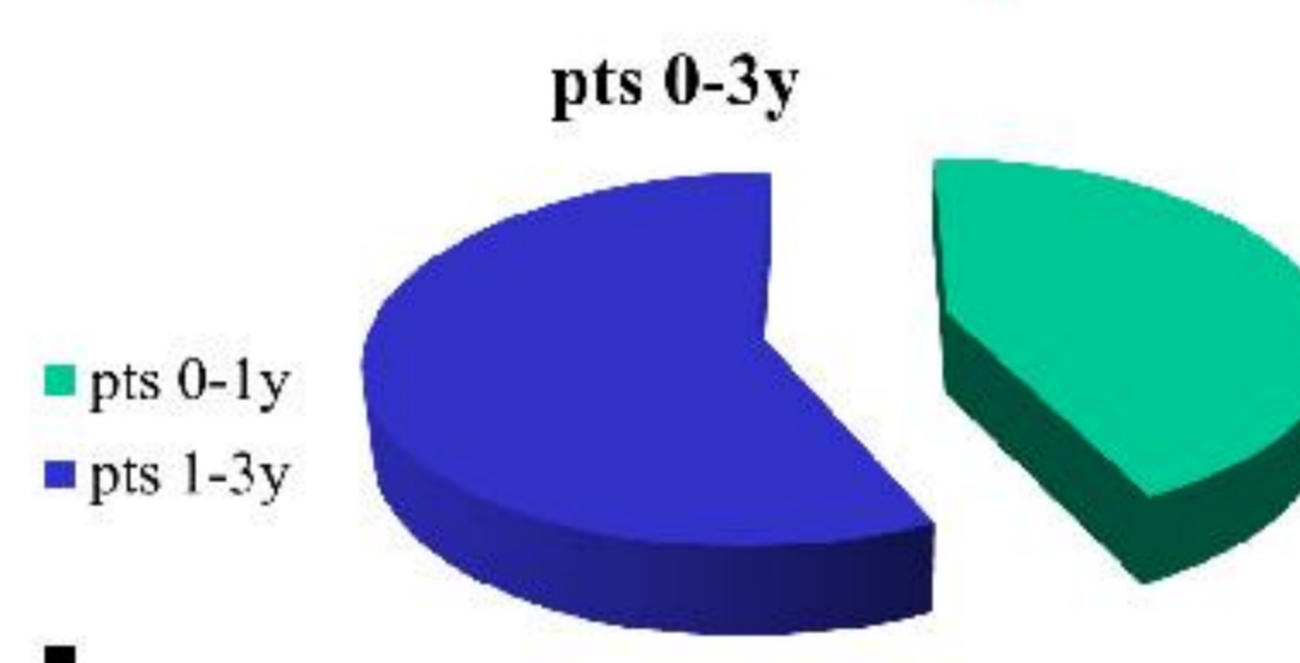
## MATERIAL AND METHOD

Retrospective analysis of medical records of 122 children from 514 patients (pts) with urolithiasis treated in our Nephrology Department between 2008 and 2014 (288 F- 56%, 226 M- 44%).

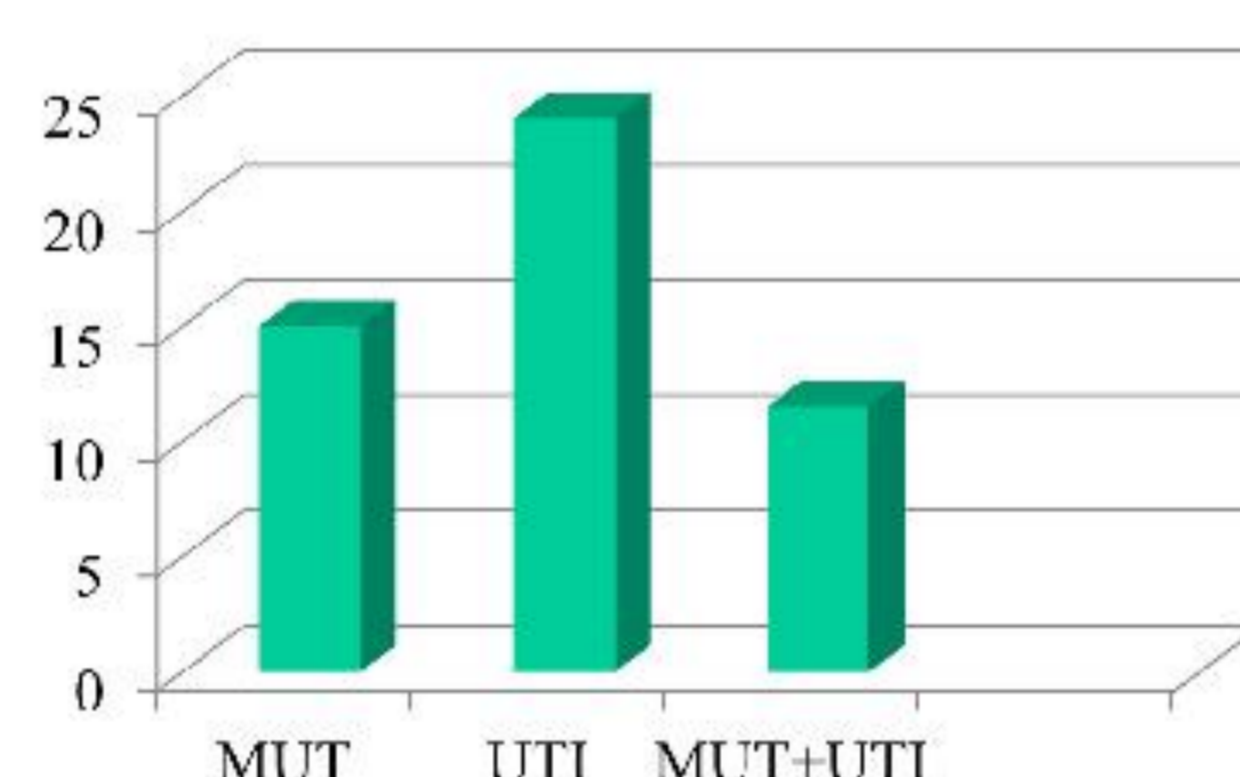
## RESULTS

Among 514 patients there were 122 children between 0-3 y (23,7% of all pts)- 59 F (48%), 63 M (52%).

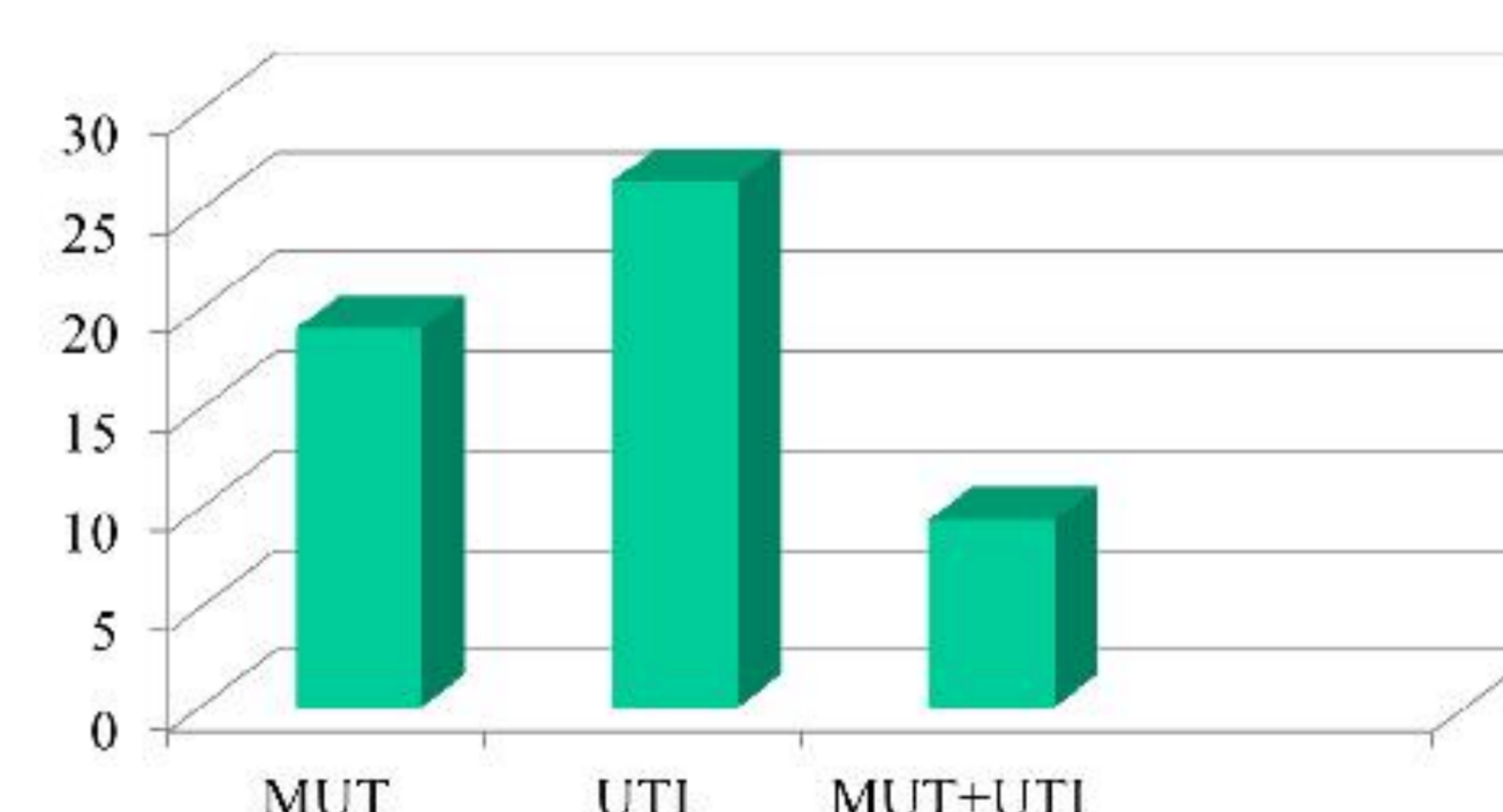
In 53 pts (43% of the youngest group) urolithiasis was diagnosed in the first year of life (24 F-45%, 29 M-55%).



Among children 0-3 y urinary tract malformations (MUT) were diagnosed in 18 pts (15%): 5 F, 13 M, urinary tract infections (UTI) were diagnosed in 29 pts (24%): 17 F, 12 M. In 14 pts (11,5%): 9 F, 5 M there were both UTI and malformations.



In subgroup of children aged 0-1 y malformations were diagnosed in 10 pts (19%): 2 F, 8 M, UTI were diagnosed in 14 pts (26,5%): 7 F, 7 M, both malformations and UTI in 5 pts (9,5%): 2 F, 3 M.



## CONCLUSION:

As much as a quarter of examined pts with urolithiasis were children from the youngest group and among them almost in 50% the disease was diagnosed in the first year of life. Urinary tract malformations and urinary tract infections were not dominant cause of urolithiasis in the youngest group of patients. It confirms the fact that even in youngest children metabolic abnormalities are main reason of stone formation.

WOJSKOWY INSTYTUT MEDYCZNY

