

Pilonidal disease: Congenital pathology or acquired? Histological findings



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Abstract

Topicality: Pilonidal disease was first described as an independent disease more than 150 years ago (A. Anderson in 1847). In despite of this, discussions are still underway to clearly identify this pathology and its etiology.

Purpose: To specify the etiology of pilonidal disease in children.

Materials and methods: In the study we analyzed the results of treatment of 37 children diagnosed with "pilonidal disease". There were 26 boys and 11 girls among the children. The average age of children was 16.4 ± 0.4 years. Obtained tissues were submitted for detailed histopathological examination. Sections of tissue samples were stained with hematoxylin and eosin. Microscopy and photographic archive of histological specimens were performed using an OLIMPUS BX 41 light microscope at 100 and 200 magnification, in the Quick PHOTO MICRO 2.3 software environment.

Research results: The study determined significant differences in the histological structure of the pilonidal cyst in children and adults. In children the mesenchymal tissue was detected, which should be absent in patients of this age group. It was also found that in children, unlike adults, the pilonidal cyst cavity contains almost no granulation tissue and is lined with a non-keratinized stratified squamous epithelium.

Conclusion: In our opinion, pilonidal disease in children is congenital. This is confirmed by the presence of embryonic (mesenchymal) tissue and other characteristic histological findings. But they are realized due to environmental factors.

Key words: pilonidal disease, children, etiology, morphology.

Biography

Shavliuk Ruslan is 28 years old. From 2008 to 2014 he studied at the Pediatric Faculty of the National Pirogov Memorial Medical University, Vinnytsya . During his studies at the university, He was actively involved in scientific activities, writing scientific articles, speaking at scientific conferences in Ukraine, Russia, Moldova, Germany. He was also the head of a student surgery group on pediatric surgery. He was constantly on duty at the hospital; assisted and conducted surgical interventions. From 2014 to 2017 he attended an internship in the specialty of pediatric surgery. In 2017, he went to graduate school and am now writing a PhD in Philosophy. Also, since 2017, he has been working as an emergency surgeon for the surgical department at Koziatyn Central District Hospital (in Vinnytsia Region). He is interested in pediatric proctology and mini-invasive surgery.

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