

Proposed New Human Tail Classification Scheme Arianne J. Boylan BA, MD; C. Corbett Wilkinson MD; Michael H. Handler MD [Institution]

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Introduction

Historically, human tails have been classified into a two-tier system of "true tails" and "pseudotails." True tails are felt to be remnants of the human embryonic tail, whereas pseudotails are manifestations of underlying abnormal structures. We believe this classification scheme to be inadequate: Not only is it inflexible, but most so-called "true tails" are likely not related to an embryonic tail at all. This paper proposes a new classification system.

Methods

We present a five-tiered classification system, adding three new tail types to the existing system. We review the records of seven infants treated at Children's Hospital Colorado, six treated specifically for tails and one for a skin-covered myelomeningocele. We use these cases to illustrate three of the tail types of our system.

Results

Our classification scheme is as follows: 1) Soft tissue tails. Most so -called "true tails" likely fall into this class. 2) Bony tails, including an entity called "sacro-coccygeal eversion," found in infants with syndromic craniosynostosis. 3) Pseudotails, or manifestations of underlying abnormal structures. 4) Bony pseudotails, or surface manifestations of prominent, but normal, vertebrae. 5) True tails, or atavistic tails, ones which truly are remnants of the human embryonic tail. This type is, at most, exceedingly rare. Of our cases, four are soft tissue tails, two are bony tails (both cases of sacrococcygeal eversion), and one is a pseudotail.

Conclusions

Although human tails have historically been classified into a two -tier system of "true tails" and "pseudotails," this system is inadequate and we present a new classification system. This system allows for classification of tails into 5 types rather than two. In addition, it reclassifies many tails that formerly would have been classified into the "true tail" category into a "soft tissue tail" category, where they more properly belong.

Learning Objectives

1.By the end of this session participants should be able to identify each of the classifications of human tails

2.Participants should be able to describe the old and proposed new classification scheme

3.Participants should be able to discuss the association between FGFR2 mutations and bony tails which was previously described by these senior authors

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