

## CASE REPORT ΕΝΔΙΑΦΕΡΟΥΣΑ ΠΕΡΙΠΤΩΣΗ

### Congenital or natural partial circumcision

Isolated deficient prepuce is an entity with little attention in literature. Hooded prepuce is the only well-known preputial deficit in all cases of hypospadias. Aposthia is a very rare developmental anomaly in which the foreskin is totally absent, known as congenital or natural circumcision, too. A penis with microposthia has exactly the same appearance as a partial circumcised penis. Two sporadic cases of male neonates with a natural partial circumcised foreskin presentation are reported. Microposthia can be baptized as congenital partial circumcision. It is not a harmful anomaly, but it can be associated with other anomalies of external genitalia. Congenital partial circumcision results in a tolerated esthetic appearance. It could reduce the risk of phimosis/paraphimosis and balanoposthitis, but it may result in long-term meatal stenosis.

The preputial mucocutaneous tissue normally envelops the entire glans penis. We know that hypospadias is usually associated with ventral preputial deficit. Aposthia or complete preputial agenesis is a very rare developmental anomaly, in which the foreskin is totally absent with a clearly seen coronal sulcus, known as congenital or natural circumcision, too. A penis looks circumcised without erection.<sup>1</sup> Microposthia is a condition of having a natural shorter prepuce.<sup>2</sup> Distal glans penis with urethral meatus is visible without foreskin retraction that totally cover the coronal sulcus.<sup>2</sup> Two unusual sporadic presentation cases of isolated microposthia are presented.

#### CASE PRESENTATION

Two male term neonates, who were born without any pregnancy complication history, presented with a shorter foreskin during the pediatric surgical screening clinical examination before hospital discharge.

Their penis looked partially circumcised, with normal anatomic position of the urethra. Urethral meatus, scrotum and testis were normal (fig. 1). Ultrasound revealed normal urinary tract findings.

There were no other cases of external genitalia anomaly documented in the family history. The newborns were discharged from the obstetric clinic with a normal urinary stream.

#### DISCUSSION

The embryologic prepuce is formed at the same time with the normal glanular urethra.<sup>3</sup> This is an androgen dependent formation,<sup>2</sup> which is confirmed in case of hypospadias. A deficient prepuce may be diagnosed as an isolated condition, or along with other external genitalia abnormalities.<sup>4</sup> The ventral deficient/hooded prepuce, in almost all cases of hypospadias, is the most well-known type of prepuce anomalies. An isolated deficient prepuce is an entity with little attention in literature. Very limited sporadic cases of complete aposthia with normal anatomic position of the urethra have been reported recently.<sup>3,5,6</sup> Few known familiar cases of complete preputial agenesis with a history of consanguineous marriages have also been reported as well.<sup>7</sup>

Microposthia is a partial circular deficiency of all the layers of the prepuce; so it has to be differentiated from

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Συγγενής μερική περιτομή

Περίληψη στο τέλος του άρθρου

#### Key words

Congenital partial circumcision  
Deficient prepuce  
Microposthia  
Natural partial circumcision  
Preputial anomaly

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**Figure 1.** Two cases of congenital partial circumcision – distal glans penis with urethral meatus is visible without foreskin retraction that cover totally the coronal sulcus.

the rare cases of a deficient-hooded prepuce without hypospadias.<sup>4</sup> A penis with microposthia has the exact appearance of a partial circumcised penis, so microposthia can be baptized as congenital or natural partial circumcision. In communities that are not familiar with the appearance of a classic extended circumcision for religious reasons, the expected and tolerated esthetic result is this of a partial circumcised glans.<sup>8</sup> Additionally, an important amount of the erogenous preputial tissue necessary for normal sexual function is preserved.<sup>9</sup> Microposthia is not a harmful anomaly by itself, but can be associated with other anomalies of external genitalia like undescended testicle and penile curvature or torsion.<sup>2</sup>

It is considered that an absent prepuce protects against acquired sexually transmitted diseases, penile and cervical cancer.<sup>5</sup> A partial lack of the foreskin could reduce the risk

of balanoposthitis or phimosis and paraphimosis in boys with microposthia. Although a boy could benefit from lack of his foreskin, he has also a risk of complications such as meatal stenosis.<sup>5</sup> Exposed glans and meatus early in life in cases of aposthia and microposthia may keep the urinary meatus in direct contact with napkins which may results in meatitis.<sup>4</sup> The impact of childhood deficient prepuce in the sexual lives of men is still very difficult to evaluate and fully understand.<sup>10</sup>

In conclusion, microposthia can be baptized as congenital or natural partial circumcision. It is presented with a totally tolerable esthetic appearance of the penis, in cases without other anomalies of the external genitalia. It probably reduces the risk of phimosis/paraphimosis and balanoposthitis, but it could result in a long-term meatal stenosis.

## ΠΕΡΙΛΗΨΗ

### Συγγενής μερική περιτομή

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Το μεμονωμένο έλλειμμα ακροποσθίας συνιστά μια σπάνια συγγενή ανατομική ανωμαλία με ελάχιστες αναφορές στη διεθνή βιβλιογραφία. Στην κλινική πράξη συνήθως συναντάται το χαρακτηριστικό έλλειμμα της πρόσθιας ακροποσθίας που συνοδεύει τον υποσπαδία. Η πλήρης αποσθία είναι μια πολύ σπάνια αναπτυξιακή ανωμαλία στην οποία η ακροποσθία απουσιάζει εντελώς, γνωστή και ως συγγενής ή φυσική περιτομή. Ένα πέος με μικροποσθία έχει ακρι-

βώς την όψη ενός μερικώς περιτομημένου πέους. Αναφέρονται δύο σποραδικές περιπτώσεις νεογνών με χαρακτηριστική φυσική εμφάνιση μερικώς περιτομημένης ακροποσθίας. Η μικροποσθία μπορεί να ονομαστεί και συγγενής μερική περιτομή. Δεν αποτελεί πάθηση, αλλά θα μπορούσε να συνυπάρχει με άλλες ανωμαλίες των έξω γεννητικών οργάνων. Η συγγενής μερική περιτομή έχει μια αποδεκτή αισθητικά εμφάνιση, και ενώ μπορεί να μειώσει την πιθανότητα μελλοντικής φίμωσης/παραφίμωσης και βαλανοποσθίτιδας, ενέχει τον μακροχρόνιο κίνδυνο στένωσης του έξω στομίου της ουρήθρας.

**Λέξεις ευρητηρίου:** Ανωμαλίες ακροποσθίας, Αποσθία, Μερική περιτομή, Μικροποσθία, Συγγενής περιτομή

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