

A 6-day-old boy is brought to the office for a routine visit after discharge from the hospital. He is exclusively breastfed and is gaining weight appropriately. He was born at 40 weeks gestation to a primigravida who had an uncomplicated vaginal delivery. Physical examination at rest shows bilateral medial deviation of the forefoot. Ankle movements appear normal, and passive and active movement of the foot results in lateral deviation of the forefoot. The remainder of the physical examination is normal. Which of the following is the best next step in management of this patient?

- ☐ A. Foot radiographs
- ☐ B. Karyotype analysis
- ☐ C. Reassurance
- ☐ D. Serial manipulation and casting
- ☐ E. Ultrasound of hips

Submit

A 6-day-old boy is brought to the office for a routine visit after discharge from the hospital. He is exclusively breastfed and is gaining weight appropriately. He was born at 40 weeks gestation to a primigravida who had an uncomplicated vaginal delivery. Physical examination at rest shows bilateral medial deviation of the forefoot. Ankle movements appear normal, and passive and active movement of the foot results in lateral deviation of the forefoot. The remainder of the physical examination is normal. Which of the following is the best next step in management of this patient?

- ☐ A. Foot radiographs [4%]
- ☐ B. Karyotype analysis [1%]
- ☒ C. Reassurance [60%]
- ☐ D. Serial manipulation and casting [27%]
- ☐ E. Ultrasound of hips [8%]

[Proceed to Next Item](#)

Explanation:

User Id: 

	Metatarsus adductus	Congenital clubfoot
Clinical features	<ul style="list-style-type: none">• Flexible positioning• Medial deviation of forefoot• Neutral position of hindfoot	<ul style="list-style-type: none">• Rigid positioning• Medial/upward deviation of forefoot & hindfoot• Hyper-plantar flexion of foot
Treatment	Reassurance	Serial manipulation & casting; surgery for refractory cases

©UWorld

Metatarsus adductus (MA), the most common congenital foot deformity, is characterized by **medial deviation** of the **forefoot** with a normal neutral position of the hindfoot. This deformity is usually bilateral and occurs most frequently in first-born infants, likely due to the crowded positioning in a smaller, primigravid uterus.

Over 90% of cases are characterized by **flexible feet** that overcorrect both passively and actively into lateral deviation (abduction) as in this patient. This most common form

features	<ul style="list-style-type: none"> • Medial deviation of forefoot • Neutral position of hindfoot 	forefoot & hindfoot <ul style="list-style-type: none"> • Hyper-plantar flexion of foot
Treatment	Reassurance	Serial manipulation & casting; surgery for refractory cases

©UWorld

Metatarsus adductus (MA), the most common congenital foot deformity, is characterized by **medial deviation** of the **forefoot** with a normal neutral position of the hindfoot. This deformity is usually bilateral and occurs most frequently in first-born infants, likely due to the crowded positioning in a smaller, primigravid uterus.

Over 90% of cases are characterized by **flexible feet** that overcorrect both passively and actively into lateral deviation (abduction), as in this patient. This most common form of MA **corrects spontaneously**; therefore, treatment is usually unnecessary.

(Choice A) MA is a clinical diagnosis and does not require imaging for management unless the deformity is persistent and/or if congenital clubfoot is suspected. **Congenital clubfoot** can be distinguished from MA by rigid medial and upward deviation of both forefoot and hindfoot.

(Choice B) Karyotyping should be considered in patients with congenital clubfoot due to an increased risk of chromosomal anomalies. However, MA is not associated with an underlying syndrome.

(Choice D) Treatment of congenital clubfoot requires orthopedic evaluation as well as serial manipulation and casting soon after birth. For the minority of cases of MA that do not passively correct to a neutral position, stretching exercises and/or serial casting can be considered.

(Choice E) Developmental dysplasia of the hip is confirmed by ultrasound after physical examination findings show hip instability. Developmental dysplasia is associated with breech presentation, a contraindication to vaginal delivery, and not with MA.

Educational objective:

Metatarsus adductus is a congenital foot deformity in which the forefoot turns inward. In the majority of cases, the foot is flexible and the condition resolves spontaneously.

References:

1. [The newborn foot.](#)

Media Exhibit

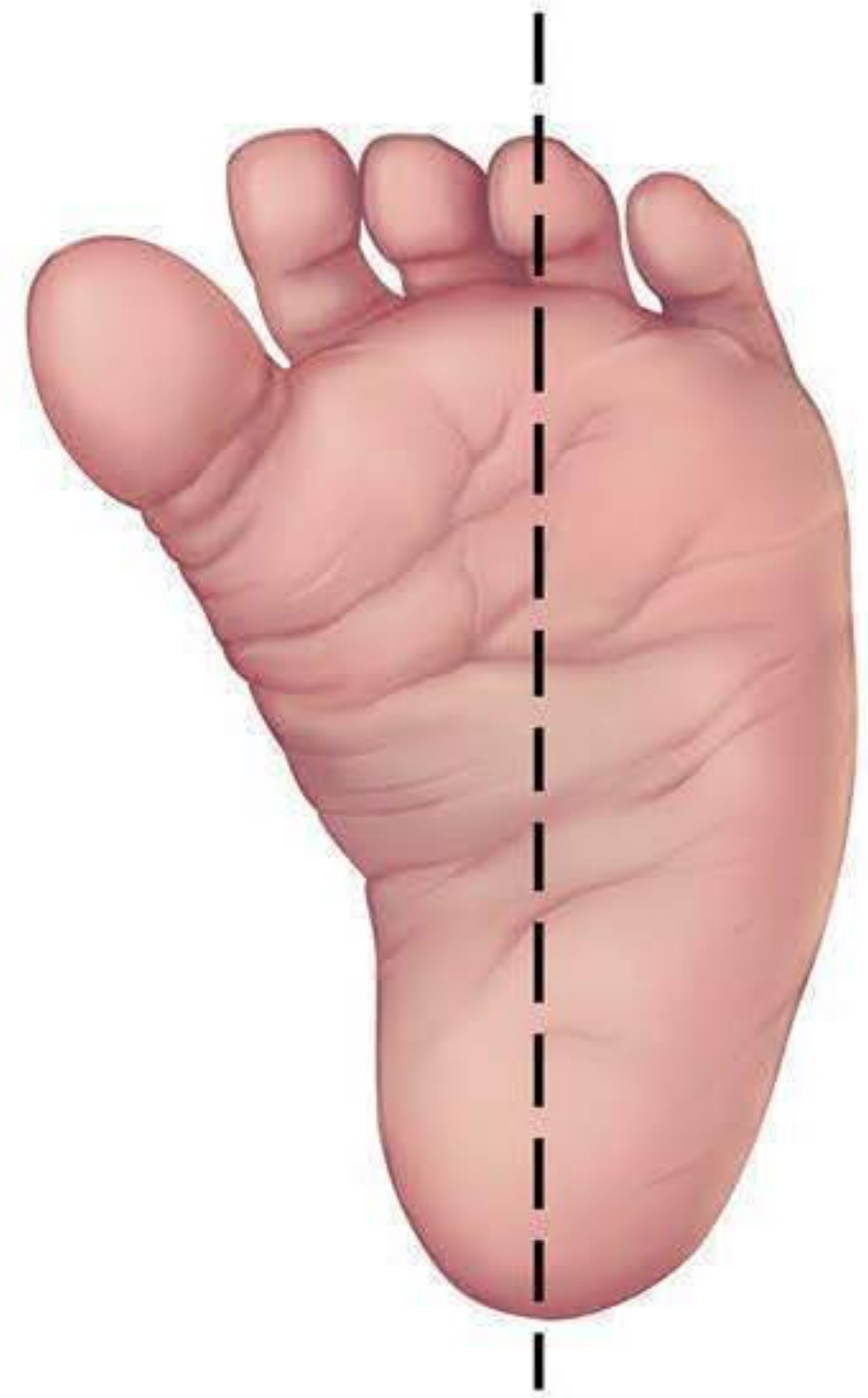
Metatarsus adductus

Normal foot



©UWorld

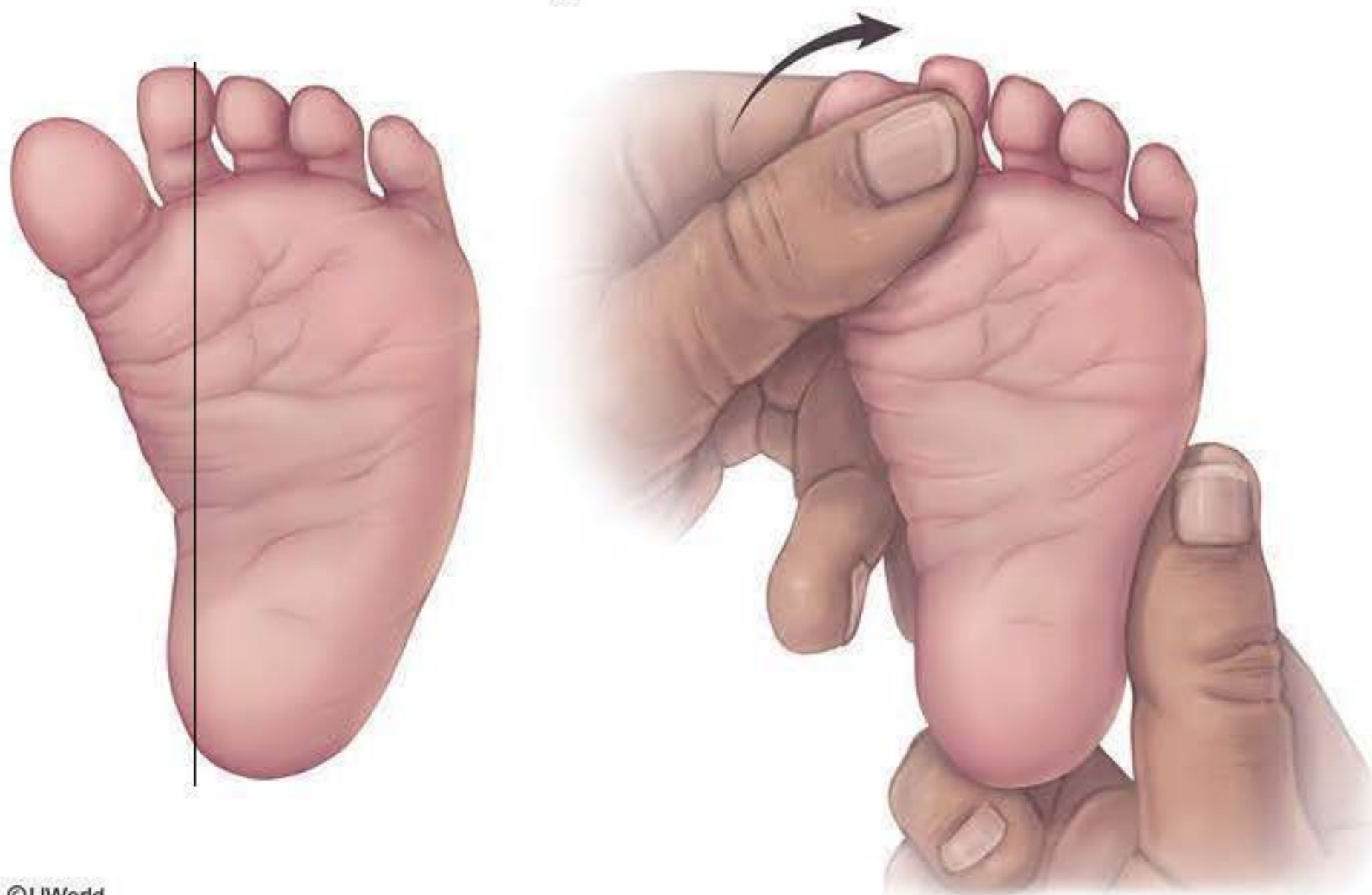
Metatarsus adductus



Media Exhibit

Metatarsus adductus

Correcting metatarsus adductus



©UWorld

Media Exhibit

Clubfoot (talipes equinovarus)



©UWorld

