



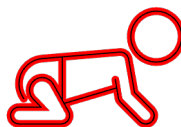
Pes planus or **flat feet**, is a condition where the **arches of the feet are flattened**. Loss of the medial longitudinal arch of the foot, heel valgus deformity, and medial talar prominence.

PRESENTATION

<ul style="list-style-type: none"> Generally asymptomatic in children Pain and discomfort in bilateral arches, heels, lower legs, feet or ankles Cramps at night Difficulty standing on tiptoes Foot fatigue Swelling 	PHYSICAL EXAM	
	<ul style="list-style-type: none"> Observation – in standing, calcaneal valgus is apparent, the medial arch will appear dropped and there will be foot eversion Assess arch height when sitting, standing, and on tiptoes 	<ul style="list-style-type: none"> Arch should be present on tip toes if not, rigid pes planus → requires further investigations & surgical referral Foot shape Range of motion of foot and ankle Joint stability Tendon & muscle strength Gait & footwear assessment

CAUSE

- Genetic factors** leading to insufficient arch development
- Injuries** to the foot or ankle
- Weakness** or **dysfunction** in muscles and tendons supporting the arch



Infants have **flexible flat feet** with arch development observed around 3 years. It takes until 7 to 10 years for the arch height to reach adult values.

DIAGNOSIS

CLINICAL DIAGNOSIS:

Generally, investigations are unnecessary. **X-rays** can be considered for **severe pain** or concern regarding **bone alignment** or other **structural abnormalities**

TYPES

- Flexible flat feet:** arches appear when not weight-bearing
- Rigid flat feet:** arches remain flat regardless of weight-bearing

CO-MORBIDITIES

- | | |
|--|---|
| <ul style="list-style-type: none"> Cerebral palsy Trisomy 21 Marfan Syndrome Ehlers-Danlos | <ul style="list-style-type: none"> Charcot joint Tibialis posterior dysfunction Obesity Arthropathies |
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MANAGEMENT

- | | |
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| <ul style="list-style-type: none"> Orthotic devices, such as over the counter arch supports or custom insoles Appropriate and supportive footwear | <ul style="list-style-type: none"> Physical therapy exercises to strengthen foot muscles Maintaining a healthy weight to reduce stress on the feet |
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Dr. Katharine V. Jensen (Pediatrics Resident, University of Alberta) and Dr. Jeanine McColl (Pediatric Rheumatologist, University of Calgary) for www.pedscases.com