Heel Pad Sign
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Fig. 1: Lateral x-ray of both feet showing heel pad thickness of approximately 30 mm. There is calcification posterior to the left calcaneal bone.

A 25 year old male patient, presented to us with proximal muscle weakness for last 2 months. On detailed history he revealed non availability of shoes and footwear of his size for last 3 years. However no history of visual disturbances or headache was there. General examination showed large frontal prominences with raised eyebrows and protruding jaw. Both hands and feet were large. Proximal muscles were wasted. X-ray lateral view of foot showed enlarged calcaneal spur and heel pad thickness of 30 mm (Fig. 1).

Heel pad thickness of more than 25 mm is said to suggest acromegaly. Acromegaly was suspected in this patient and X-ray skull demonstrated enlarged pituitary fossa and MRI brain showed a macro adenoma, which was further confirmed by, failure of growth hormone suppression after a glucose load test.

Although not pathognomonic, a heel pad thickness greater than 25 mm may indicate acromegaly. The overabundance of growth hormone in acromegaly causes, among other things, gradual enlargement of hands, feet, and exaggeration of facial features. Not limited to the bones, however, enlargement of other parts of the body, such as the soft tissues of the heel may help to diagnose acromegaly.

Heel pad thickness can also be noted in long term Dilantin therapy and has been evaluated in the past as an index of biochemical remission, however with limited efficacy.

References

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