



# Foot pain, status post talus ORIF

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# History

- MVA, October 2015.
  - “Highway speeds with feet on dashboard”
- ORIF of talar neck fracture at an outside facility





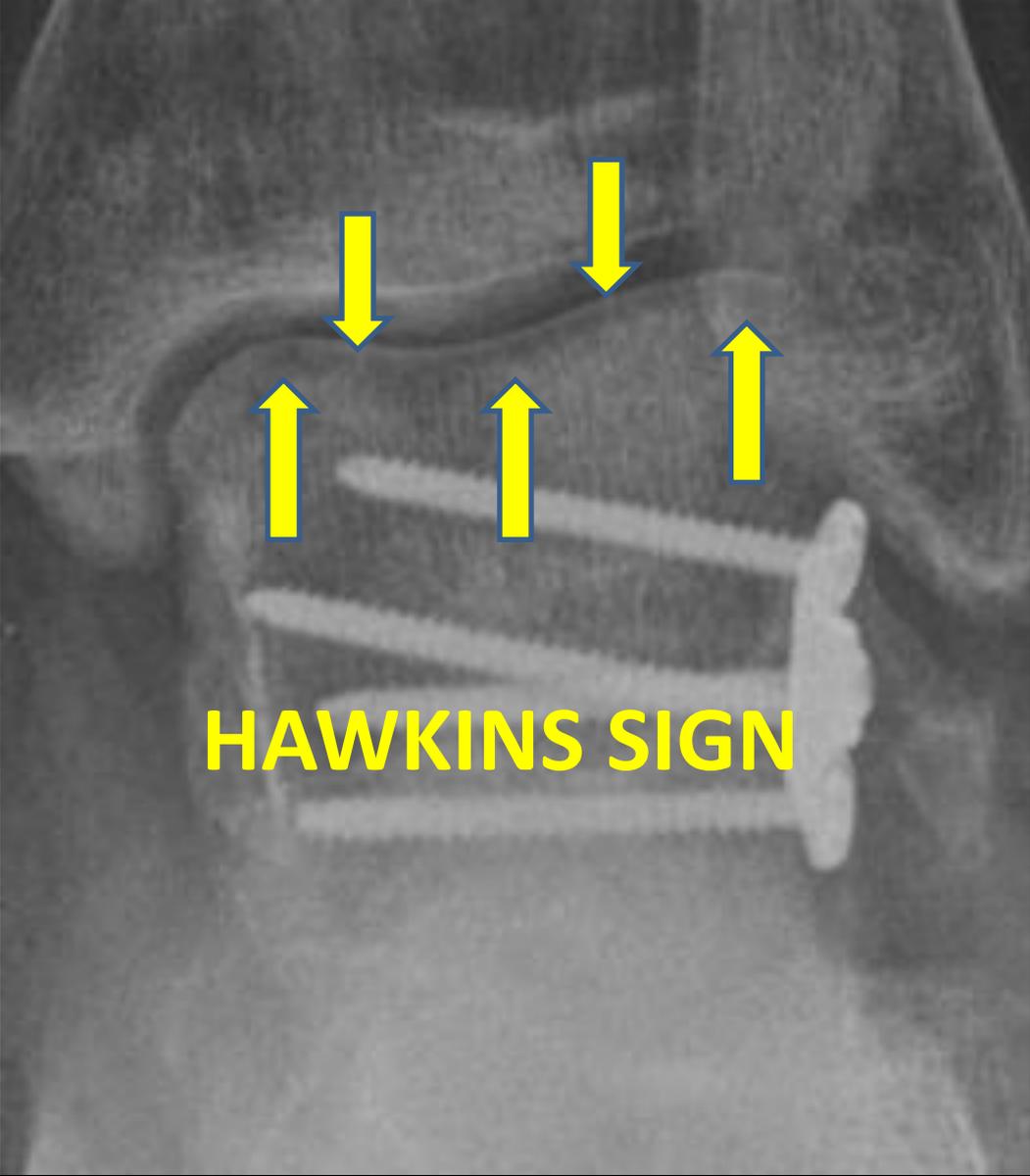


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**HAWKINS SIGN**

# Hawkins Sign

- Subchondral radiolucent band in the dome of the talus
- Typically seen 6-8 wks after a vertical fx of the talar neck
- Related to hyperemia of bone
- -Correlates with an intact blood supply
- -Development of AVN is doubtful
- Lucency typically progresses medial to lateral side of dome
- Its absence does not indicate inevitable AVN

# Prognostic Reliability of the Hawkins Sign in Fractures of the Talus

*Mohammad Tezval, MD, Clemens Dumont, MD, and Prof. Klaus Michael Stürmer*

*Tezval et al*

*J Orthop Trauma* • Volume 21, Number 8, September 2007

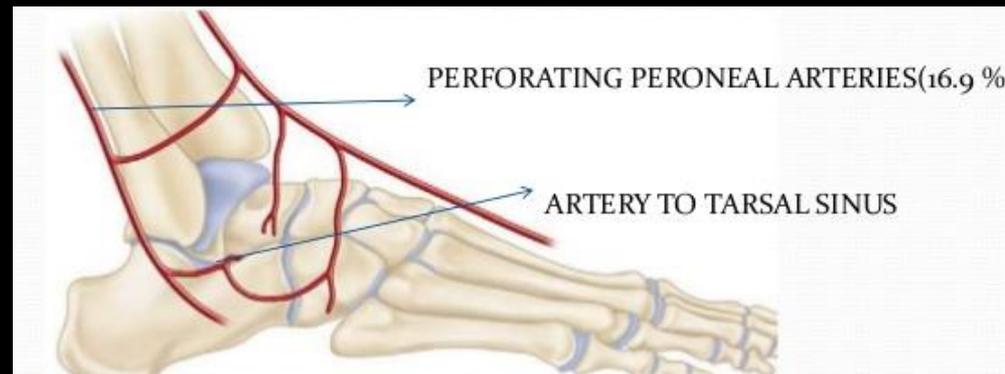
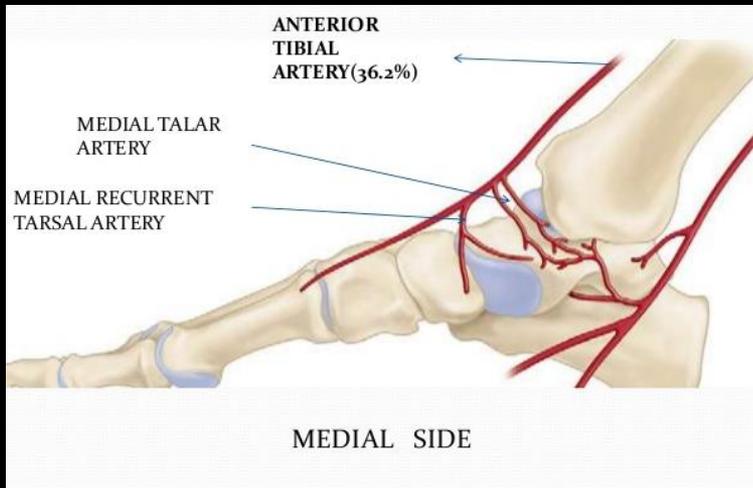
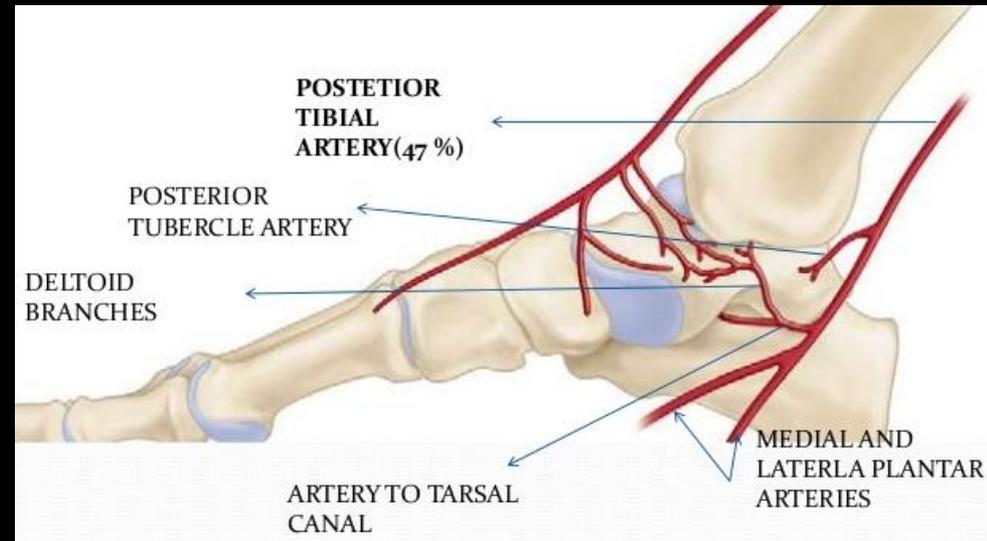
**TABLE 4. Evaluation of the Hawkins Sign**

<b>Avascular Talar Necrosis</b>	<b>Positive</b>	<b>Partial Positive</b>	<b>Negative</b>
With (n = 5)	0	0	5 (100%)
Without (n = 26)	11 (42.3%)	4 (15.4%)	11 (42.3%)

# Arterial supply to the talus

- **Body**

- **Deltoid branches**
  - Medial neck and body
- **Artery of tarsal canal**
  - -Most of body
- **Dorsalis pedis and peroneal branches**
  - Neck and lateral third



# Hawkins classification

- Hawkins classification of neck fractures type I-IV
- AVN risk increase with ↑ grade
  - Typically not diagnosed by radiographs until 6-8 months following injury

## Type I:

- Nondisplaced
- AVN Risk: 15%

## Type II:

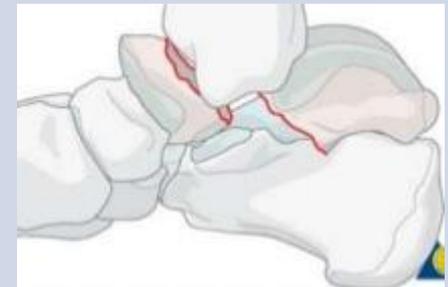
- Displaced
- Disruption of subtalar joint
- AVN Risk: 50%

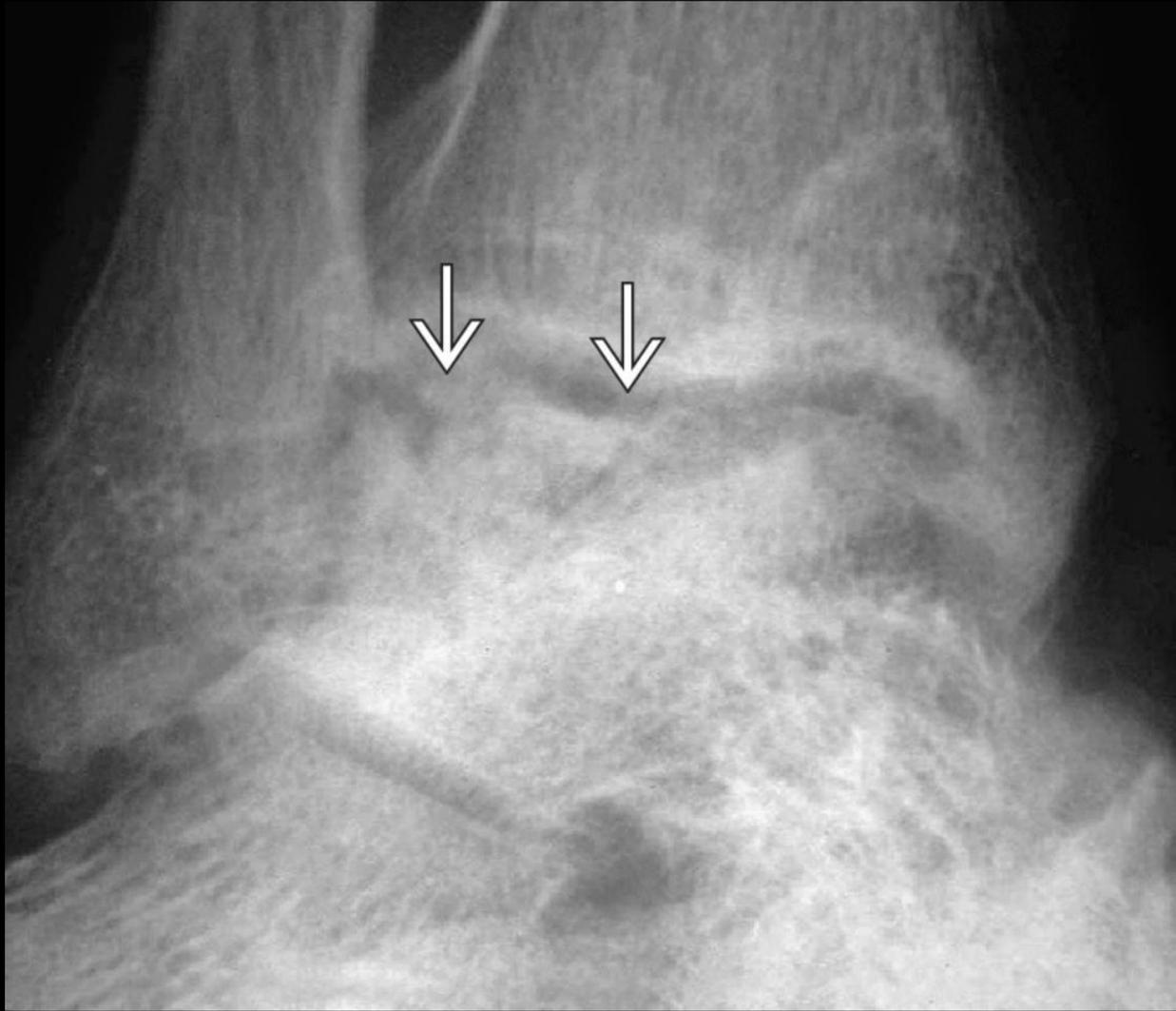
## Type III:

- Displaced
- Disruption of subtalar and ankle joints
- AVN Risk: 85%

## Type IV:

- Displaced
- Disruption of subtalar, ankle, and talonavicular joints
- AVN Risk: 100%





**STAT** 