A New ‘Specific Equinus View’ Of Lateral Radiography For Equinus Deformity

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INTRODUCTION:
Equinus deformity of the foot and/ or ankle is not uncommon in Orthopaedic practice. Treatment of the equinus depends on the cause, patho-anatomy, severity, facility, expert availability, patient’s preference and surgeon’s preference. In severe cases the gradual deformity correction is preferred. Assessment of the Equinus deformity in pre operative, immediate post operative, gradual correction phase and final outcome is crucial.

Radiographic assessment is an important component in evaluating not only the limb position in relation to the Ilizarov frame but also the position of rotating hinges, position and direction of pushing and pulling motors. Many times lateral radiography of the ankle or foot is insufficient in terms of focusing the views at the axis of the ankle and the adequacy of the image size.

MATERIALS & METHODS:
In order to obtain the view, the biggest film cassette is used and placed at the inner side of the leg, perpendicular to the x-ray beam. The center of the x-ray beam should incline exactly with the axis of the ankle dorsi/plantar flexion motion. The center of the beam should:

a) Pass through the tip of the lateral malleolus and medial malleolus.
b) About 10 degree distally tilt from the horizontal line in AP view.
c) About 20 degree posteriorly tilt from the horizontal line in axial view.

Then open the x-ray window big so that it will maximize the film and covering the whole foot and the leg as much as possible.

CONCLUSION:
We are proposing a new ‘Specific Equinus View’ of lateral radiography of the leg, ankle and foot so that the assessment of Equinus deformity can be standardized, uniform and done more accurately thus making it reproducible by any operator/radiographer without any compromise in the quality of the view and need to subject the patient to repeat the radiographs.