# <sup>1</sup> Gonstead Radiological Analysis

Lower Cervical Spine

#### <sup>2</sup> Goals when analyzing the

#### Cervical spine

- Locate Possible Posteriorities (lateral film)
- Derive an accurate listing
- Disk Analysis (D1 D6)
- Watch for pathologies or other items that will affect your adjustment

#### <sup>3</sup> Goal 1: Locate Possible Posteriorities

Remember...

You've already examined the patient and have a pretty good idea where the problems are...

#### <sup>4</sup> The Theory...

When a segment is "normally" positioned with another segment, the endplate lines will all generally
angle toward each other, to meet somewhere outside the film.

#### 5 More Theory...

• When a segment is subluxated (posteriorly) the endplate lines, extended posterior to the spine, will cross closer to the spine

#### <sup>6</sup> Two things to remember:

- If it ain't posterior, it ain't subluxated (according to Dr. Gonstead)
- If the lines diverge (open) posteriorly, you're most likely looking at a compensation.

### <sup>7</sup> Goal 2: List the subluxation on the A-P view

- Use the uncinates for the landmarks on the listing and base lines
  - ONLY mark the segment you want to list and its immediate neighbor below
- List the spinous based on the position of the spino-laminar junction

#### <sup>8</sup> C2 is a little different...

- No uncinates here, so we need different structures
  - · Tops of arches
  - Center of pedicle shadows
  - · Similar points bilaterally

## <sup>9</sup> Examples