

Evaluating the Improperly Exposed Radiograph

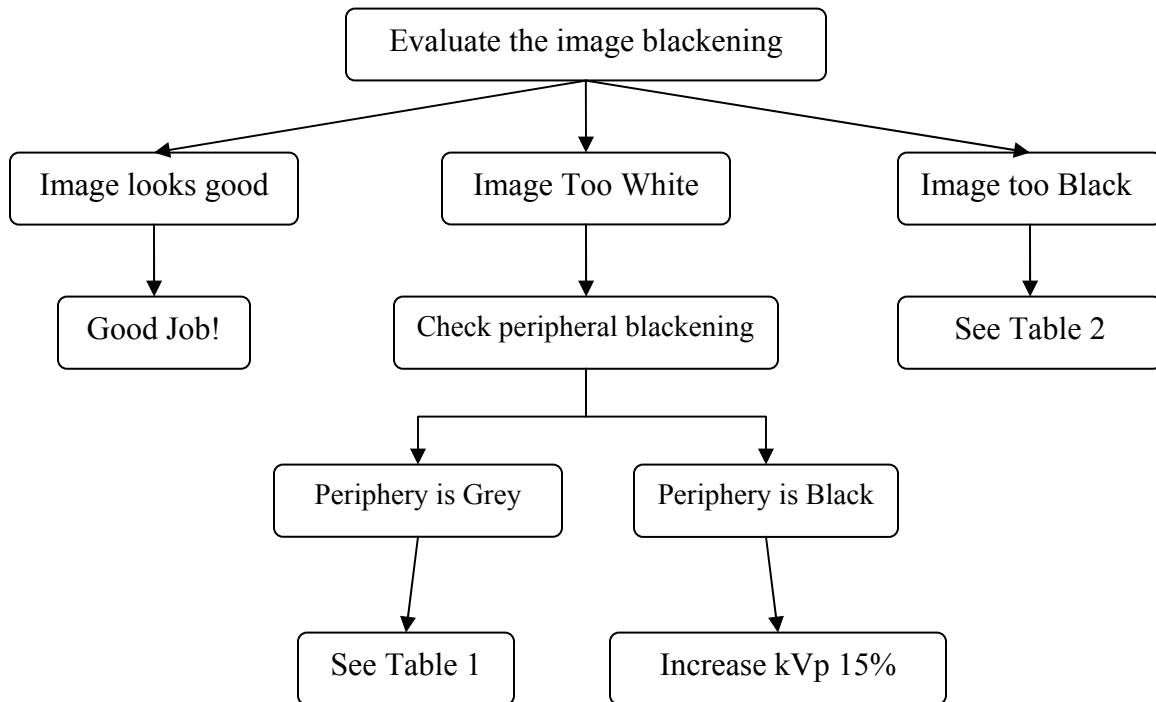


Table 1: Film is too light

Common Causes

Insufficient Technique: Double the mAs
 Used the wrong technique chart
 Measured Incorrectly
 X-ray tube height is too high
 X-ray tube not aligned with grid

Less Common Causes: Processor Problems

Developer Exhausted
 Developer Diluted
 Inadequate developer replenishment
 Developer Temperature too low
 Processor Timer Malfunction

Rare Causes:

X-ray machine miscalibration
 X-ray tube failure
 X-ray machine timer malfunction

Table 2: Film is too black

Common Causes

Excessive Technique
 Decrease mAs by 50%
 Decrease kVp by 15%
 Double Exposure
 X-ray tube height is too low

Less Common Causes: Processor Problems

Developer too strong
 Developer temperature too high
 Processor timer malfunction

Less Common Causes; Darkroom Problems

Light Fog
 Safety Light Malfunction

Rare Causes

X-ray machine timer malfunction
 X-ray machine miscalibration

