

Superficial and Orthovoltage Machines

122. Superficial machines operate between:

- A. 10-20 kV
- B. 20-50 kV
- C. 50-150 kV
- D. 150-400 kV

123. The half value layer of a superficial beam is between:

- A. 0-1 mm Al
- B. 1-10 mm Al
- C. 10-30 mm Al
- D. 30-50 mm Al

124. Superficial machines are useful for treating tumors confined to:

- A. 0-5 mm
- B. 0-10 mm
- C. 0-20 mm
- D. 0-30 mm

125. Typical SSD for superficial units is:

- A. 5-15 cm
- B. 15-20 cm
- C. 20-30 cm
- D. 30-50 cm

126. Orthovoltage therapy is delivered with x-rays produced by potentials ranging from:

- A. 50-100 kV
- B. 100-150 kV
- C. 150-500 kV
- D. 500-660 kV

127. Orthovoltage beams have a half value layer in the range of:

- A. 1-3 mm Al
- B. 3-5 mm Al
- C. 1-4 mm Cu
- D. 1-2 mm W

128. In orthovoltage therapy, 90% of the dose occurs at an approximate depth of:

- A. 0.5 cm
- B. 1.0 cm
- C. 2.0 cm
- D. 5.0 cm

129. The greatest limitation of the orthovoltage beams for treating deeper tumors is:

- A. Low dose rate
- B. High skin dose
- C. Poor penumbra
- D. Unstable dose rate

130. The f-factor for soft tissue for an orthovoltage beam is typically:

- A. About unity
- B. About 3
- C. About 10
- D. None of the above