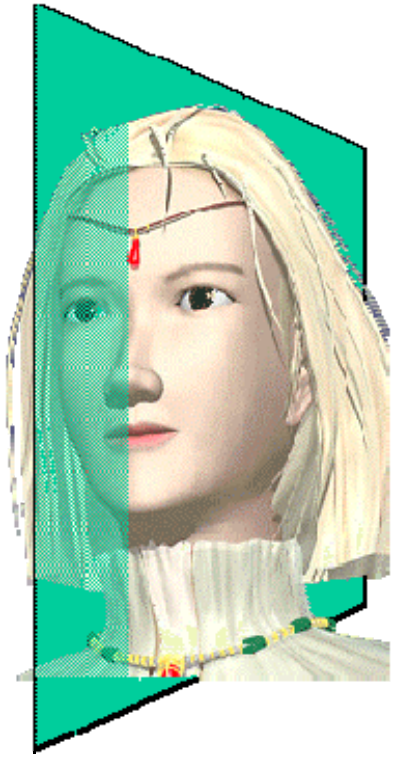
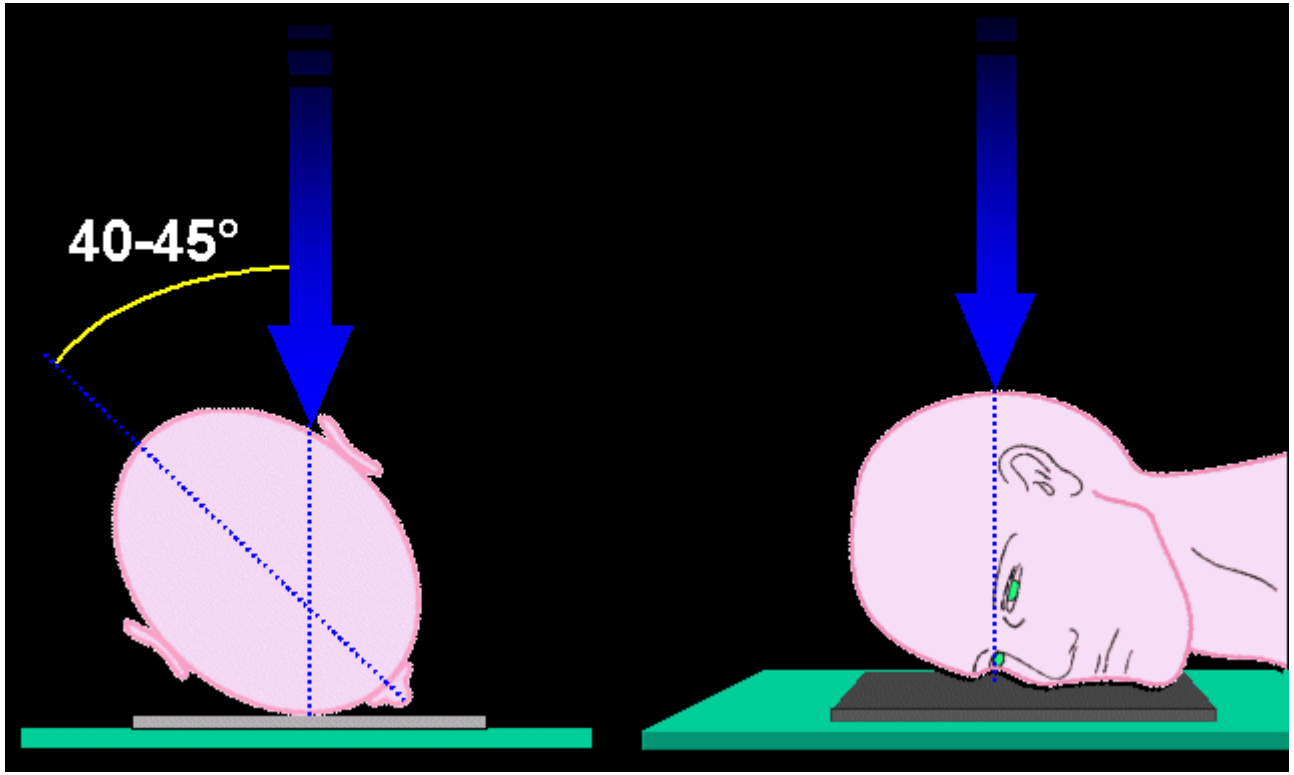
PIANO FRONTALE BIAURICOLARE
Passante per il centro dei due meati acustici esterni,
è perpendicolare al Piano Orizzontale Tedesco ed al Piano Sagittale Mediano.



PIANO SAGITTALE MEDIANO

Divide il cranio in due metà simmetriche, destra e sinistra.

PIANO ORIZZONTALE TEDESCO DI FRANCOFORTE
Passante attraverso le Linee di Base Antropologiche dei due lati.
È ortogonale al Piano Sagittale Mediano ed al Piano Frontale Biauricolare.



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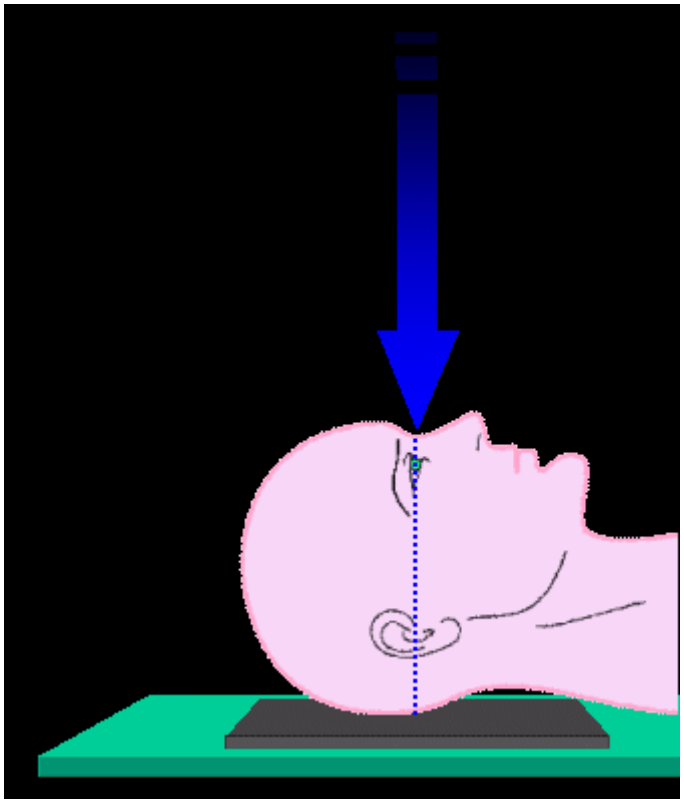
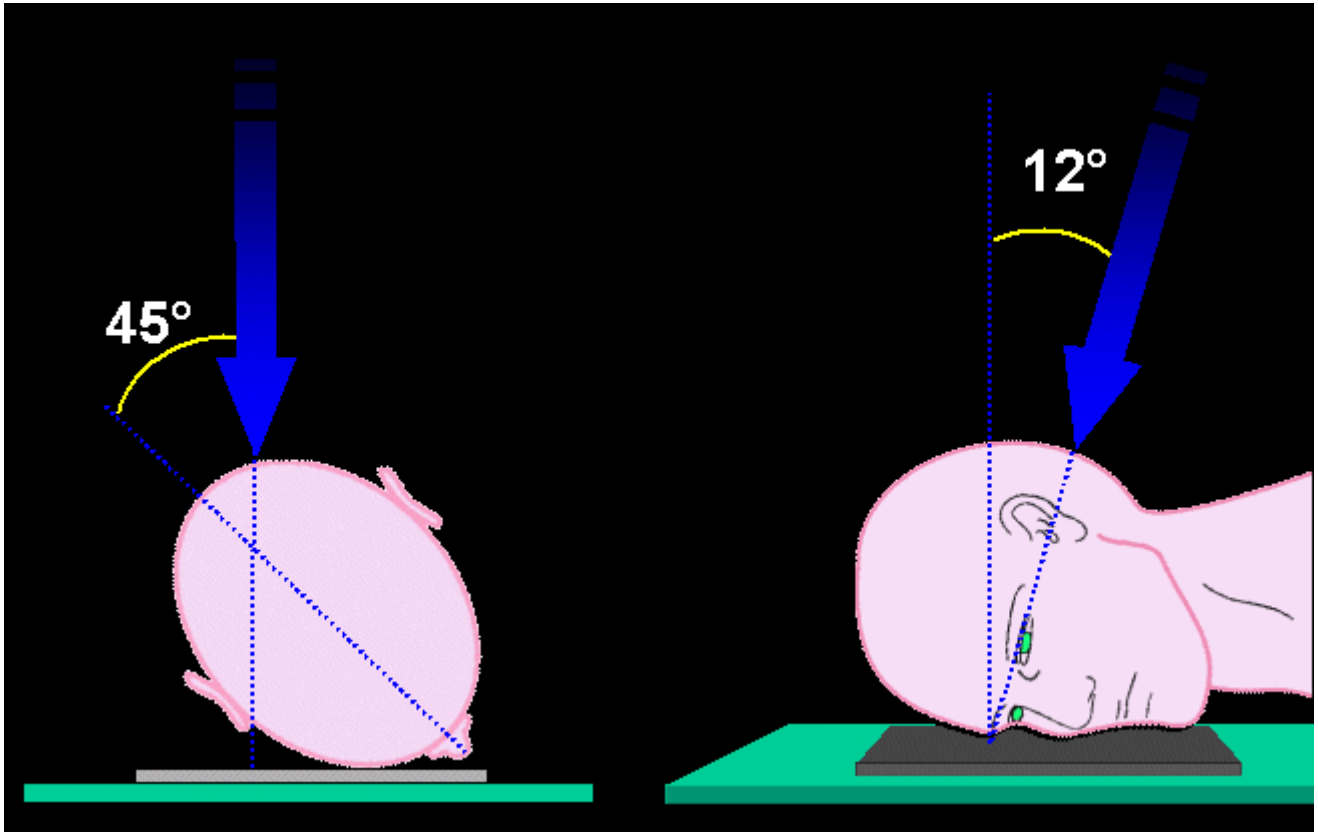
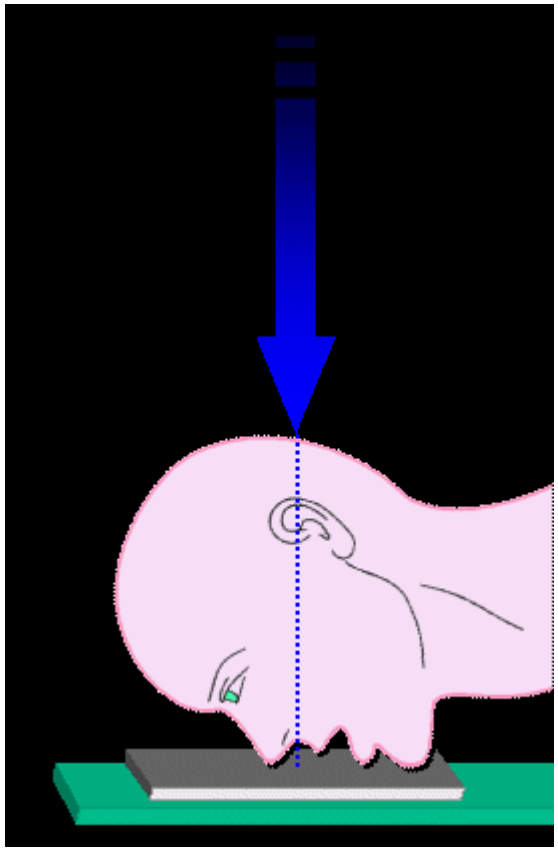
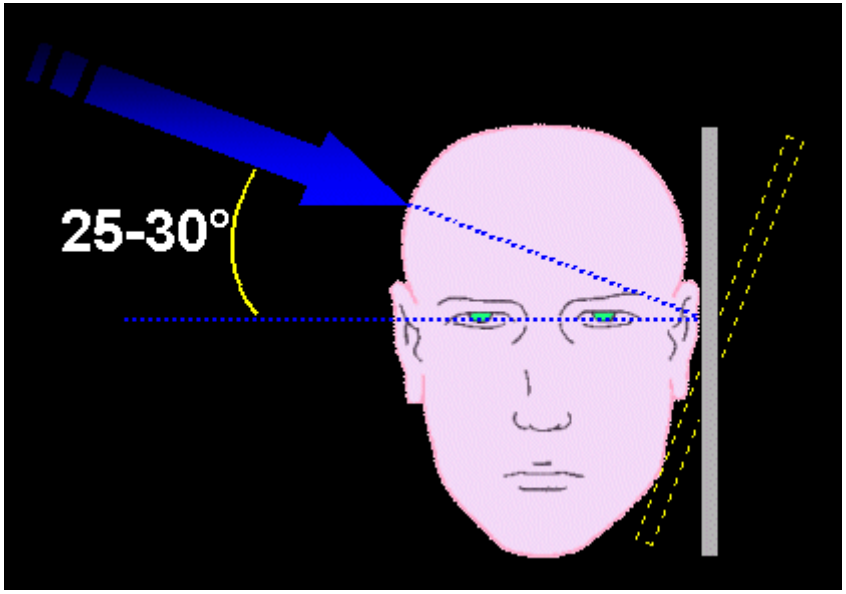
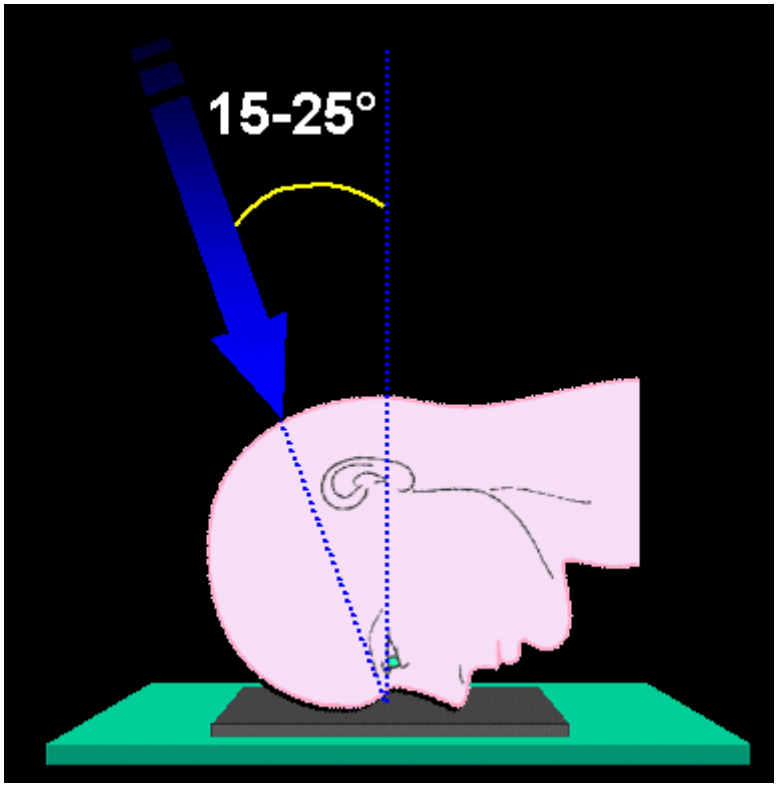
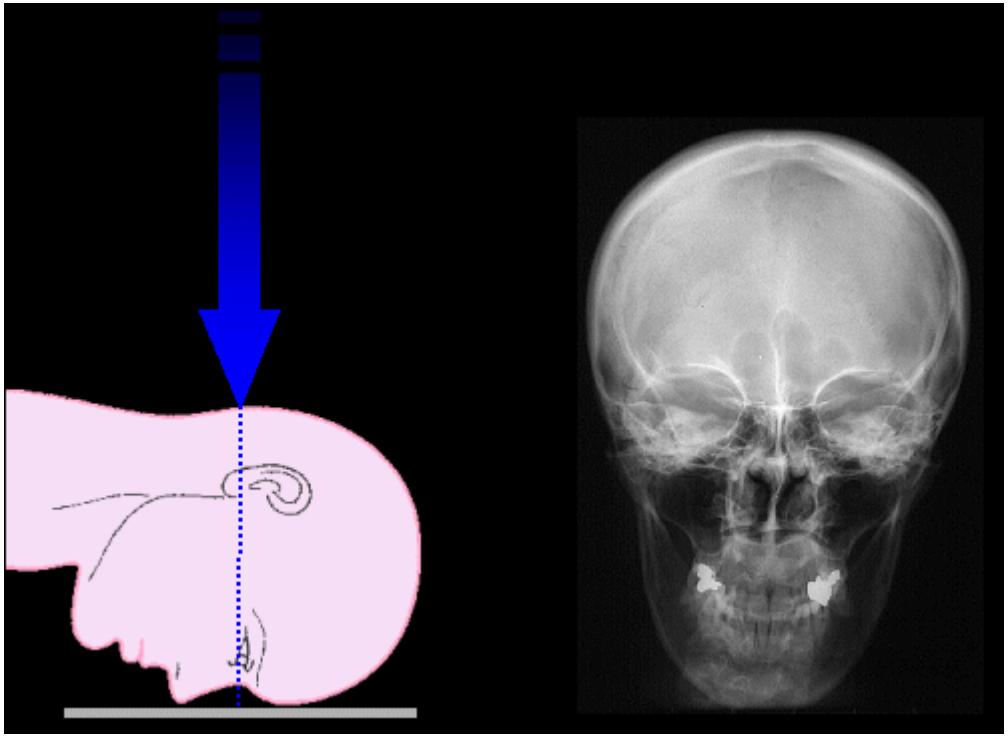


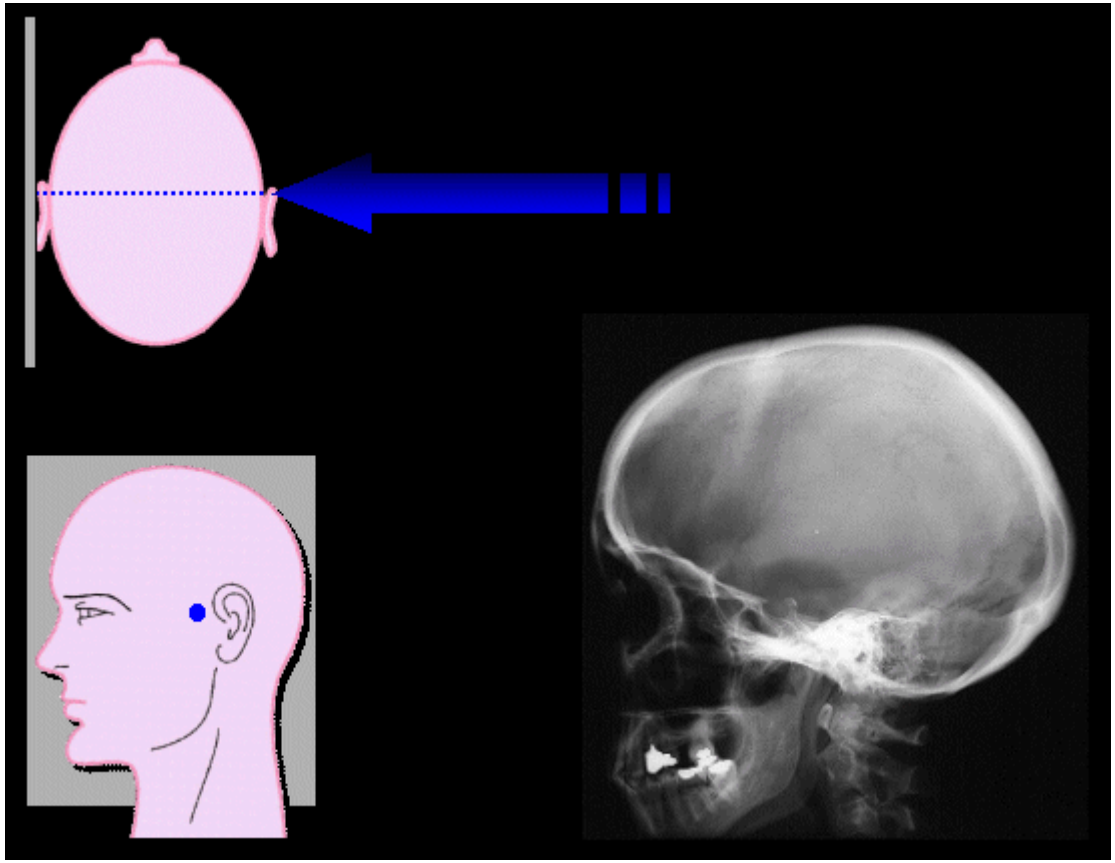

45°
12°

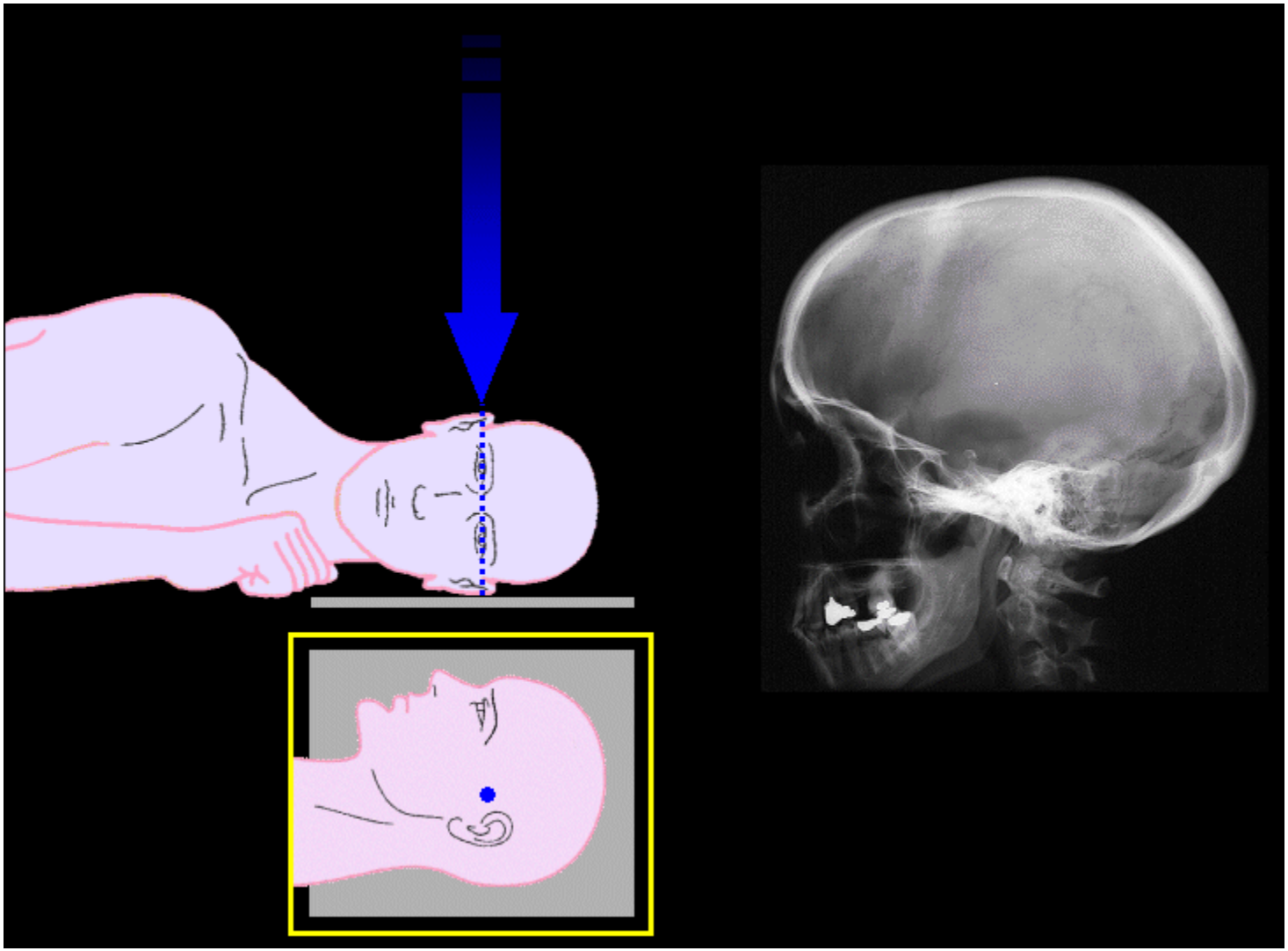


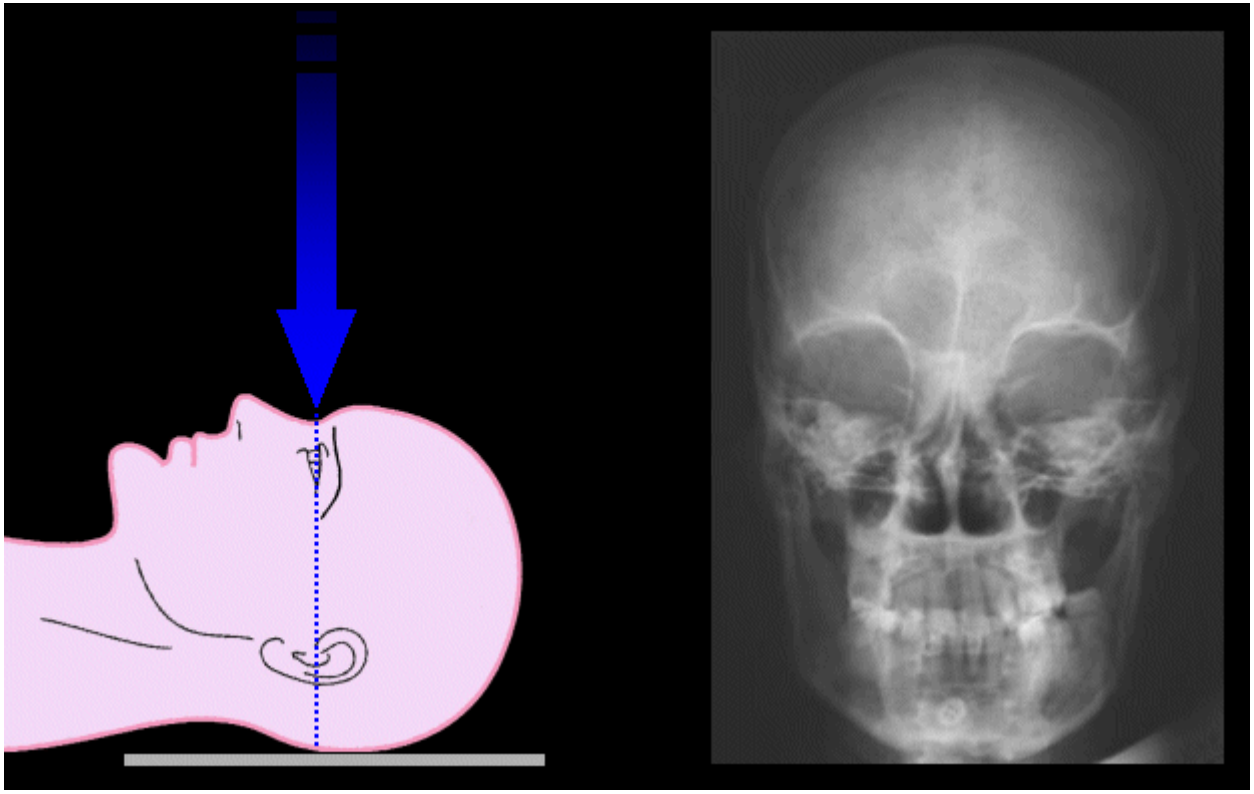

25-30°

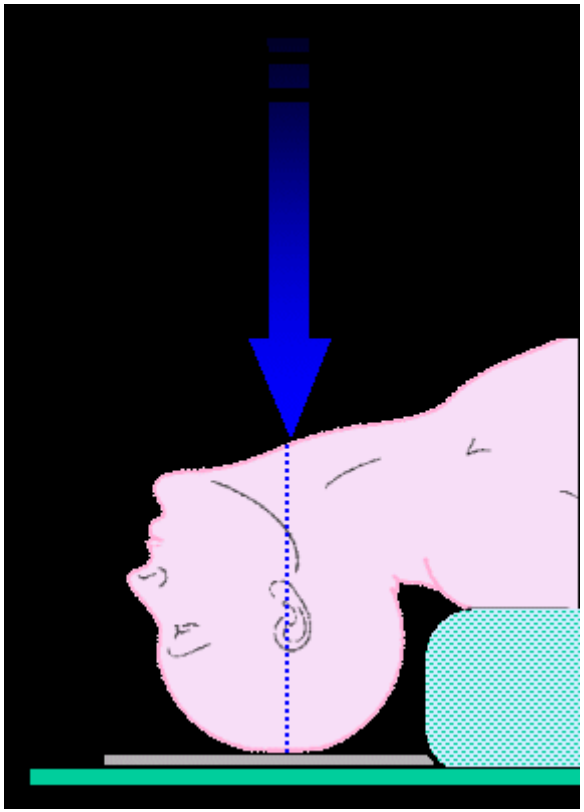

15-25°

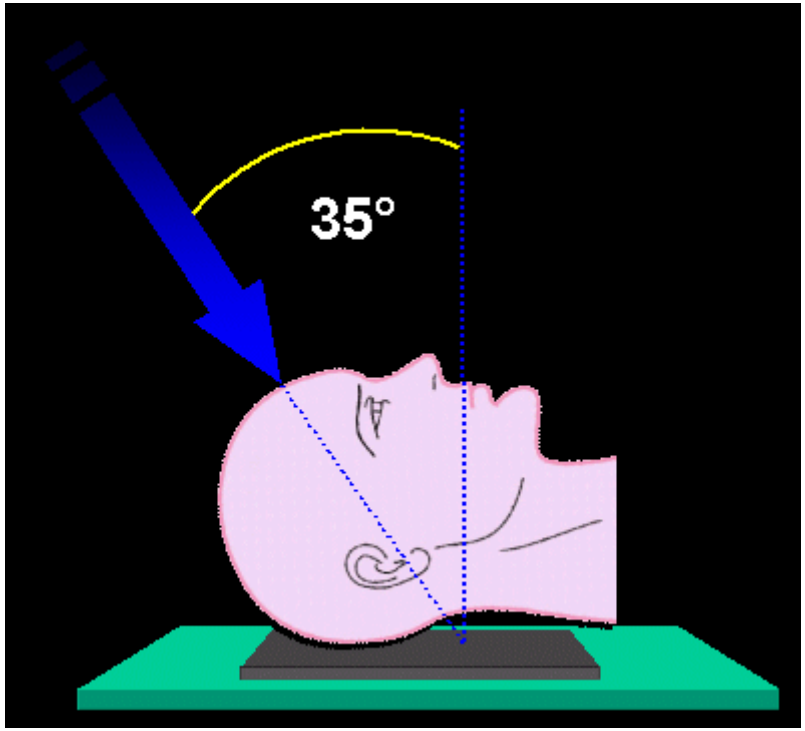












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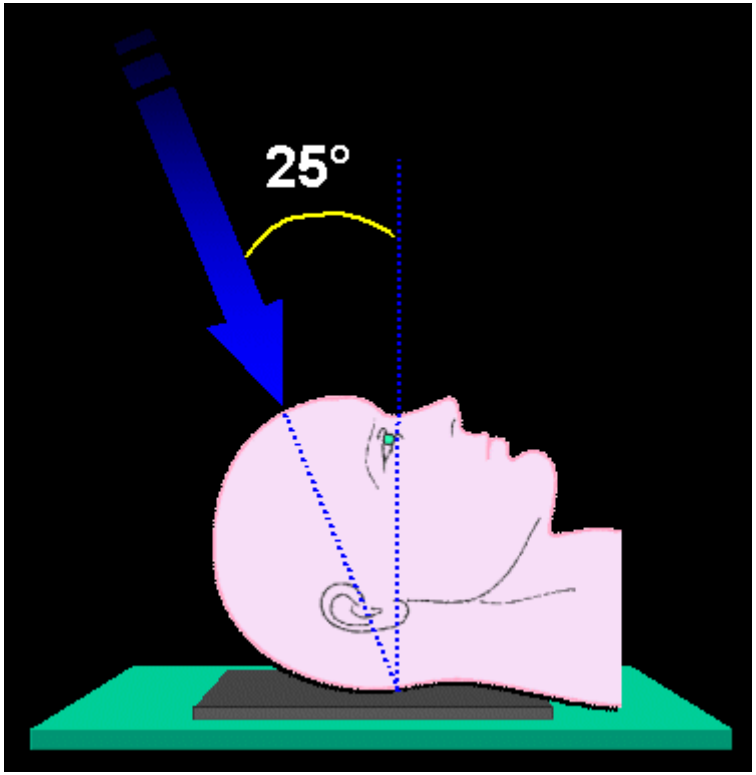
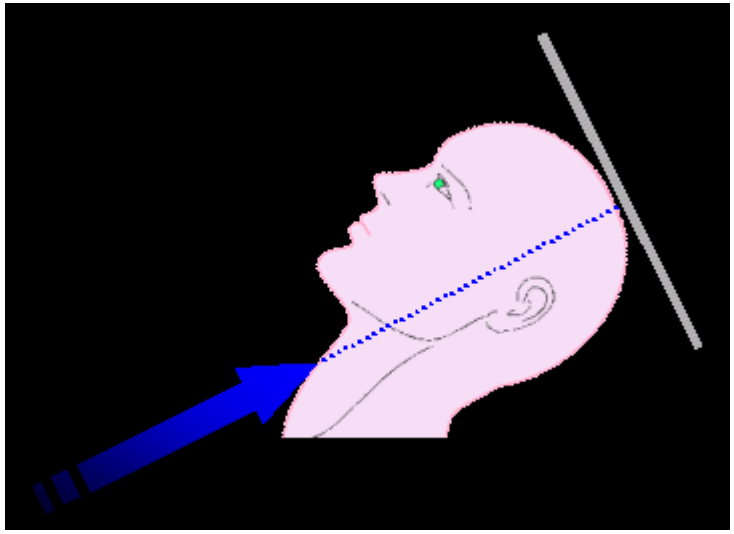
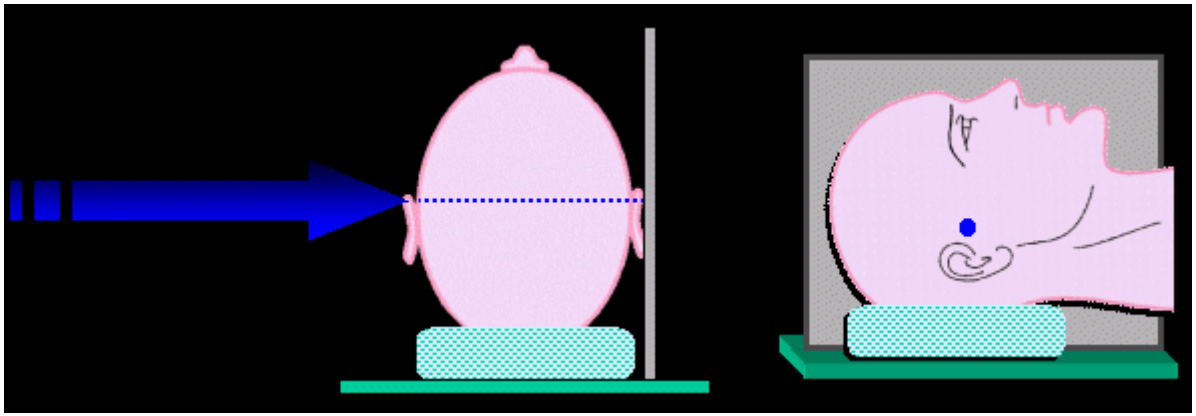
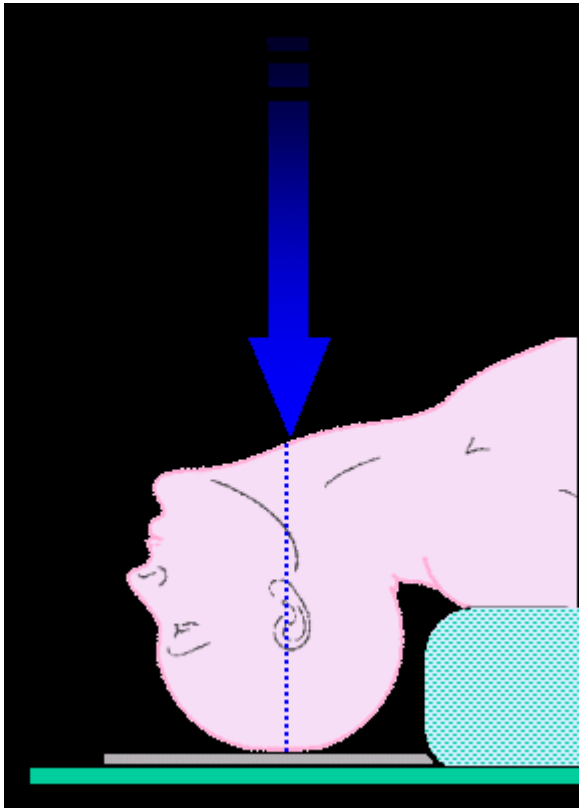
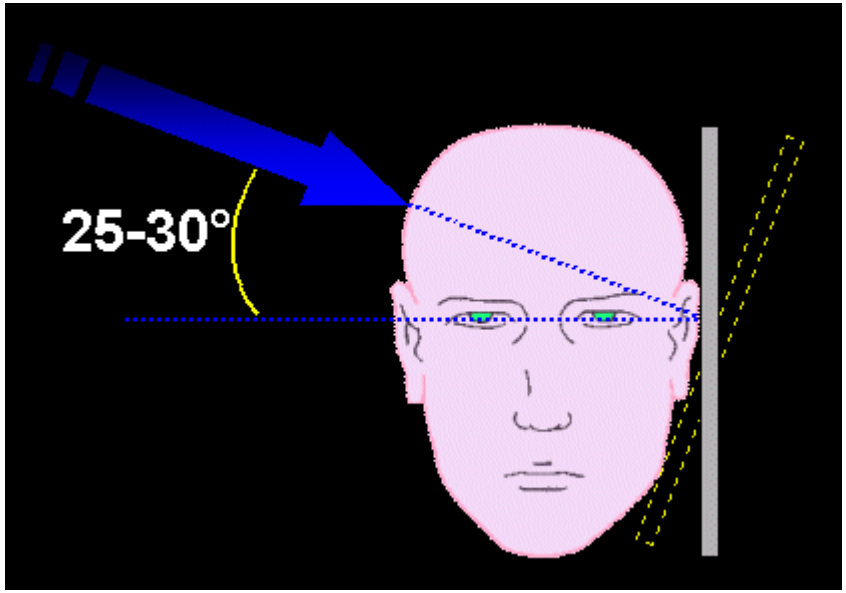

25°







PROIEZIONE ASSIALE SUBMENTO-VERTICE DI HIRTZ
Piano sagittale mediano perpendicolare al piano sensibile.
Piano orizzontale tedesco parallelo al piano sensibile.
Raggio centrale verticale, diretto in senso antero-posteriore.
Punto di incidenza: al di sopra della cartilagine tiroidea nel punto di mezzo della linea biauricolare.
STRUTTURE VISUALIZZATE:
ossa zigomatiche
base cranica

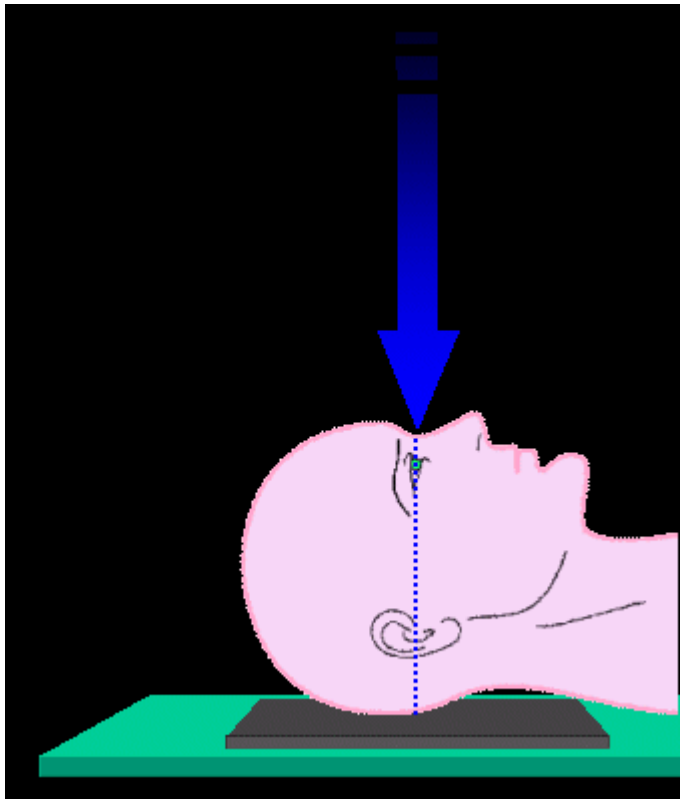


PROIEZIONE DI SCHÜLLER I

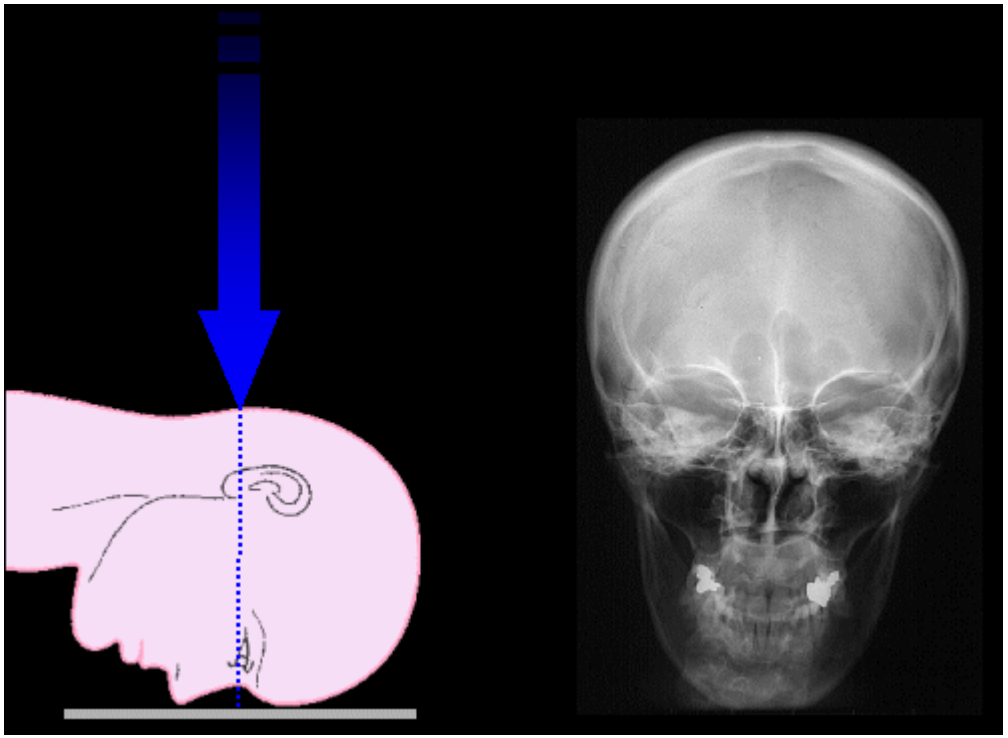
Paziente in decubito prono o seduto, con testa in appoggio sul lato in esame.
Piano sagittale mediano parallelo al piano sensibile.
Raggio centrale obliquo sul piano frontale, inclinato di 25-30° cranio-caudalmente, diretto in senso latero-laterale.
Punto di incidenza: 8 cm sopra al condotto uditivo esterno.
É possibile posizionare la cassetta radiografica perpendicolarmente al raggio incidente, in modo da ridurre l'effetto di deformazione dell'immagine.

STRUTTURE VISUALIZZATE:

mastoide
articolazione temporo-mandibolare



PROIEZIONE DI SCHÜLLER II
Paziente in decubito supino.
Raggio centrale verticale, diretto in senso antero-posteriore.
Punto di incidenza: 2 cm sopra alla radice del naso.
STRUTTURE VISUALIZZATE:
rocche
condotti uditivi interni



PROIEZIONE DI STEENHUIS

Paziente in decubito prono con testa in appoggio fronte-naso.

Piano sagittale mediano perpendicolare al piano sensibile.

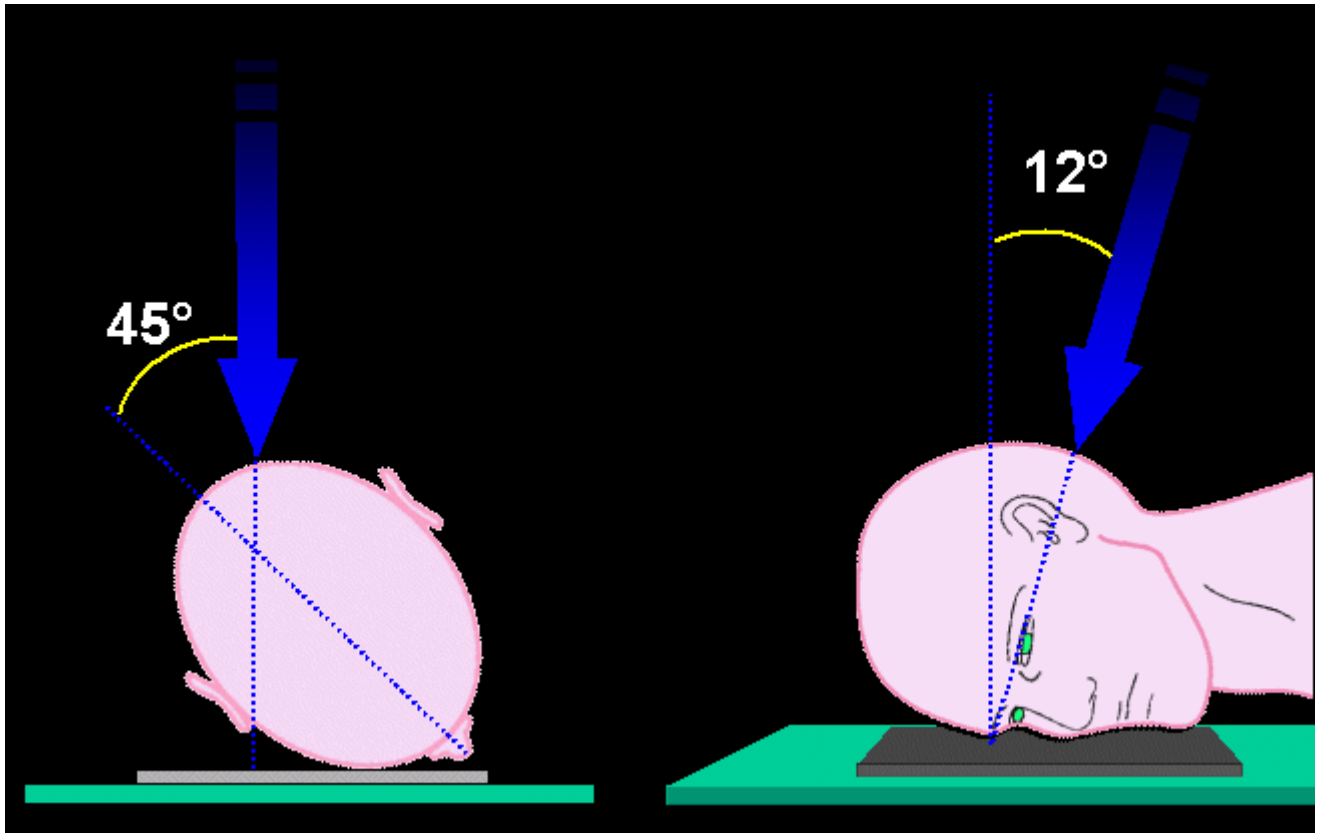
Raggio centrale verticale, diretto in senso postero-anteriore.

Punto di incidenza: protuberanza occipitale esterna.

STRUTTURE VISUALIZZATE:

rocche

condotti uditivi interni



PROIEZIONE DI STENVERS

Paziente in decubito prono, con testa ruotata di 45° verso il lato opposto a quello in esame.

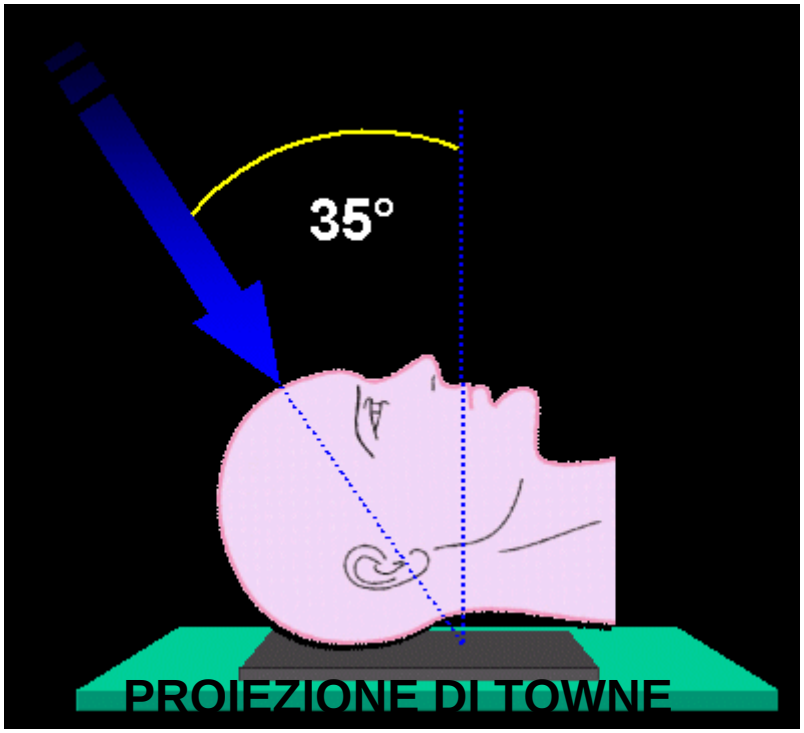
Raggio centrale obliquo sul piano sagittale, inclinato caudo-cranialmente di 12°, diretto in senso postero-anteriore.

Punto di incidenza: 2 cm all'esterno e 3-5 cm sotto alla protuberanza occipitale esterna dal lato opposto a quello in esame.

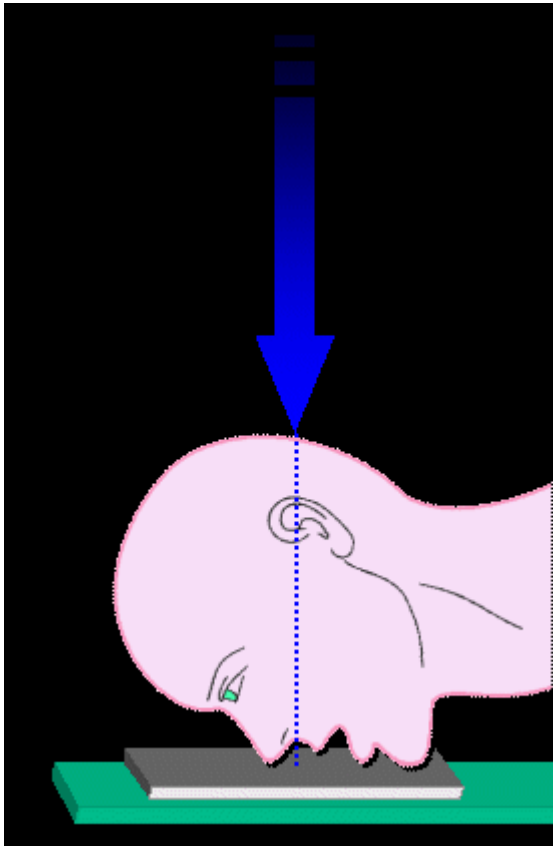
STRUTTURE VISUALIZZATE:

rocca

orecchio interno



Paziente in decubito supino.
Piano sagittale mediano perpendicolare al piano sensibile.
Raggio centrale obliquo sul piano sagittale, inclinato di 35° cranio-caudalmente, diretto in senso antero posteriore.
Punto di incidenza: limite superiore dell'osso frontale sulla linea sagittale mediana.
Da effettuare, al posto della Worms-Bretton, nei pazienti che non riescono a flettere adeguatamente il collo.
STRUTTURE VISUALIZZATE:
2/3 posteriori della volta cranica
utile nei pazienti con limitata flessione del collo



PROIEZIONE DI BLONDEAU

Paziente in decubito prono, con testa in appoggio naso-mento a bocca aperta.

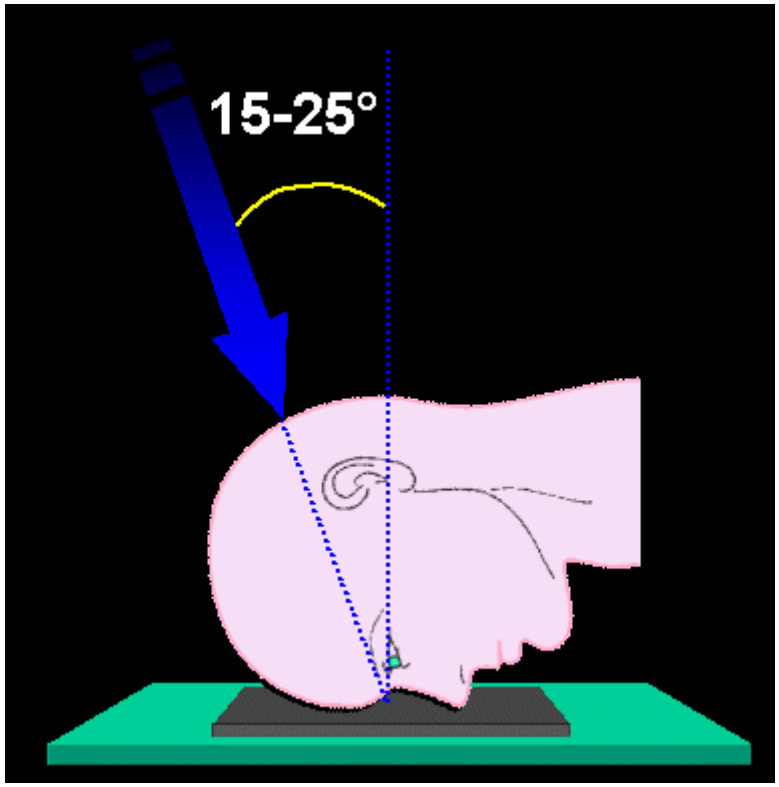
Piano sagittale mediano perpendicolare al piano sensibile.

Raggio centrale verticale, diretto in senso postero-anteriore.

Punto di incidenza: 3 cm sopra alla protuberanza occipitale esterna.

STRUTTURE VISUALIZZATE:

seni paranasali



PROIEZIONE DI CALDWELL

Paziente in decubito prono con testa in appoggio fronte-naso.

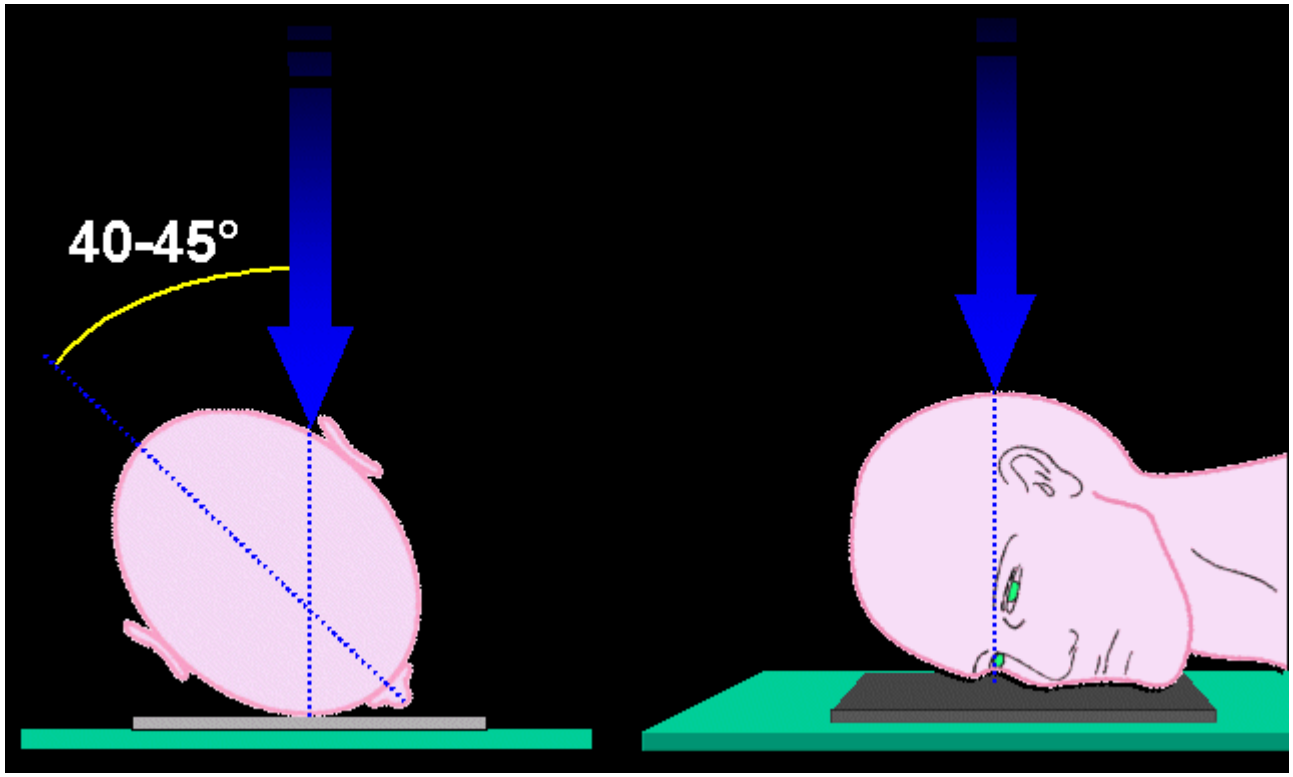
Piano sagittale mediano perpendicolare al piano sensibile.

Raggio centrale obliquo sul piano sagittale, inclinato di 15°-25° cranio-caudalmente, diretto in senso postero-anteriore.

Punto di incidenza: qualche cm sopra all'inion in modo da emergere in corrispondenza del nasion.

STRUTTURE VISUALIZZATE:

volta cranica



PROIEZIONE DI HARTMANN

Paziente in decubito prono con appoggio naso-mento.

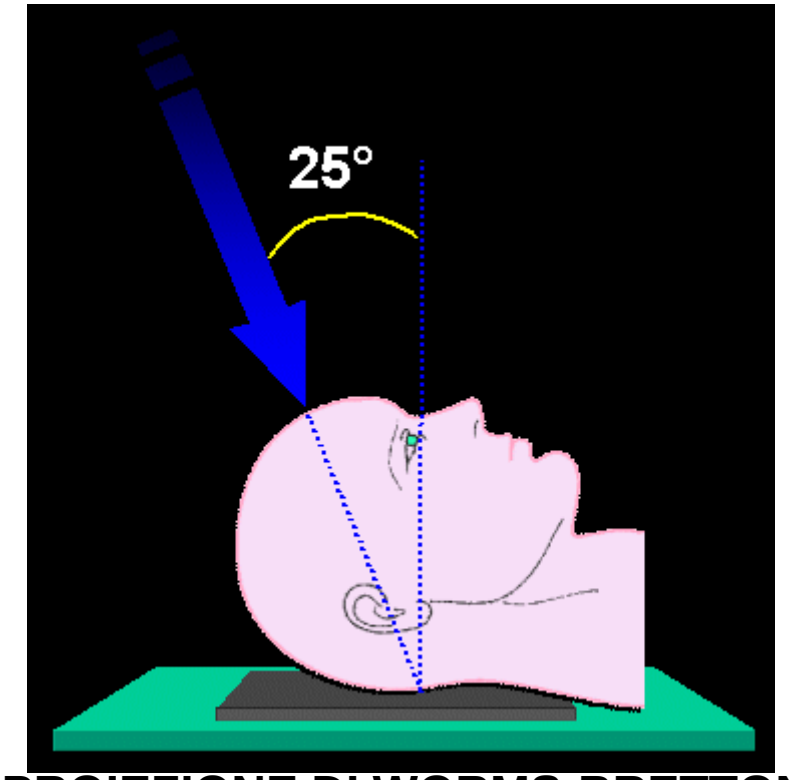
Testa ruotata di 40-45° dal lato opposto a quello in esame.

Raggio centrale verticale, diretto in senso postero-anteriore.

Punto di incidenza: squama temporale controlaterale in corrispondenza del canale ottico.

STRUTTURE VISUALIZZATE:

canale ottico



PROIEZIONE DI WORMS-BRETTON

Paziente in decubito supino con modesta flessione del collo.

Piano sagittale mediano ed orbitomeatale perpendicolari al piano sensibile.

Raggio centrale obliquo sul piano sagittale, inclinato di 25° cranio-caudalmente, diretto in senso antero-posteriore.

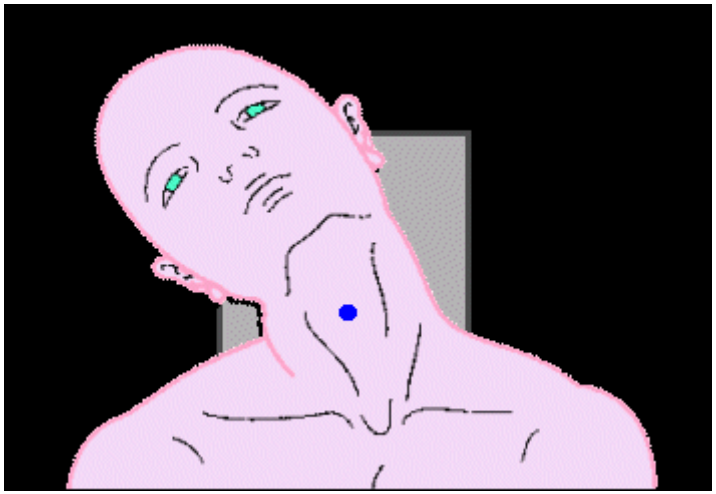
Punto di incidenza: limite superiore dell'osso frontale sulla linea sagittale mediana.

STRUTTURE VISUALIZZATE:

2/3 posteriori della volta cranica

forame occipitale

rocche



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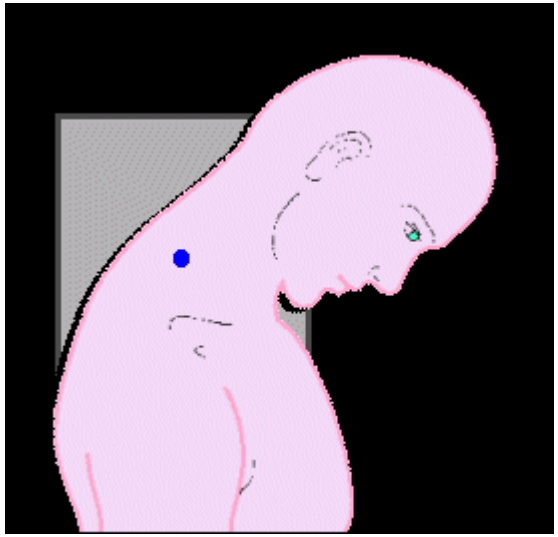
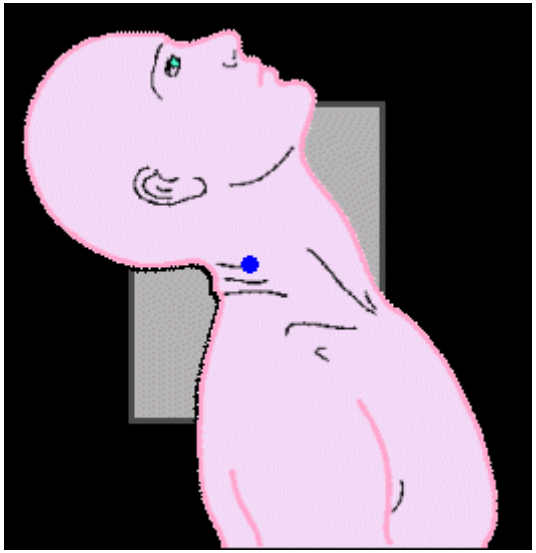
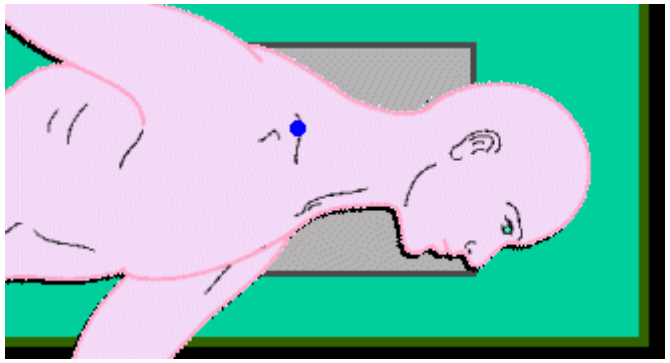
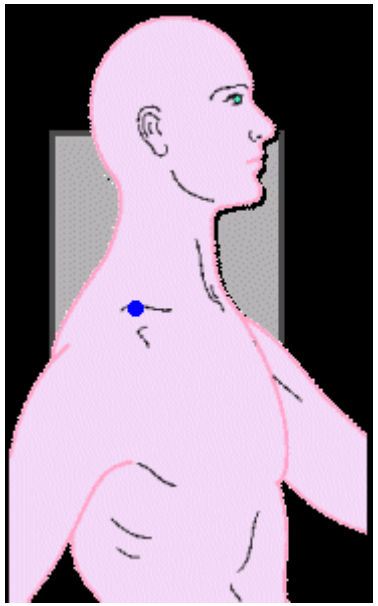
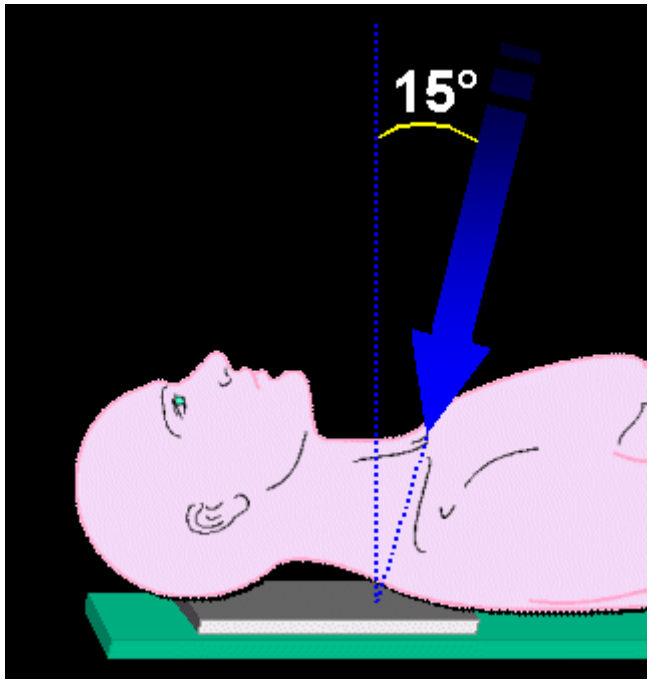
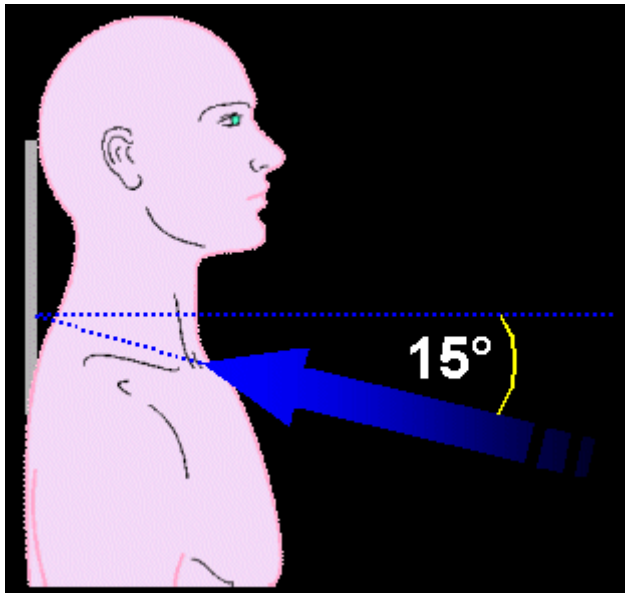









15°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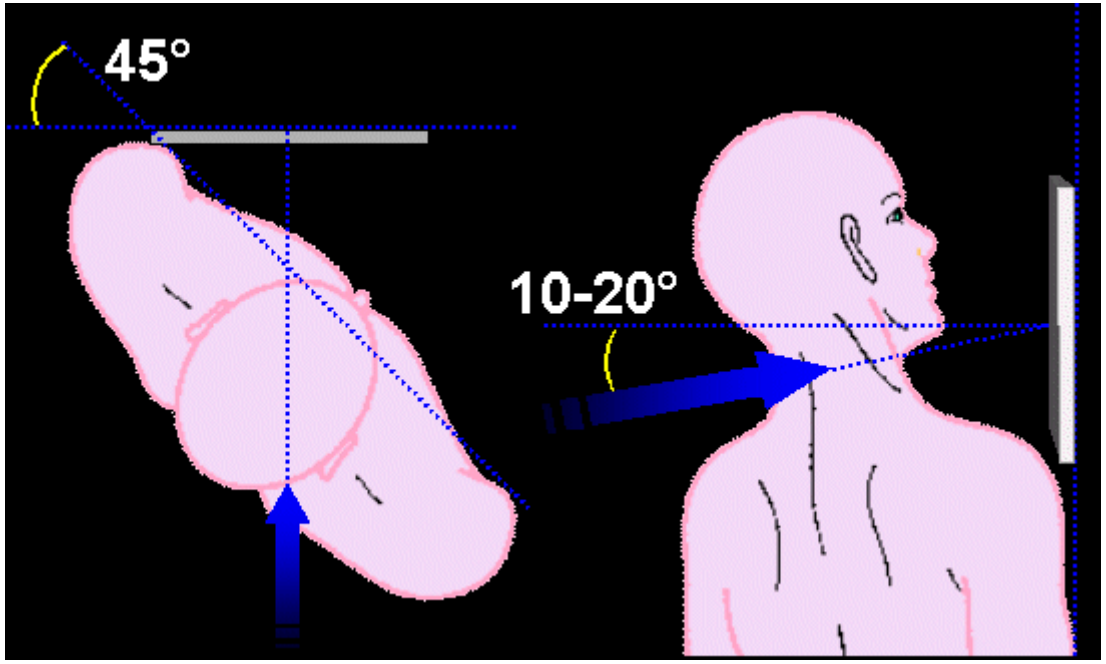
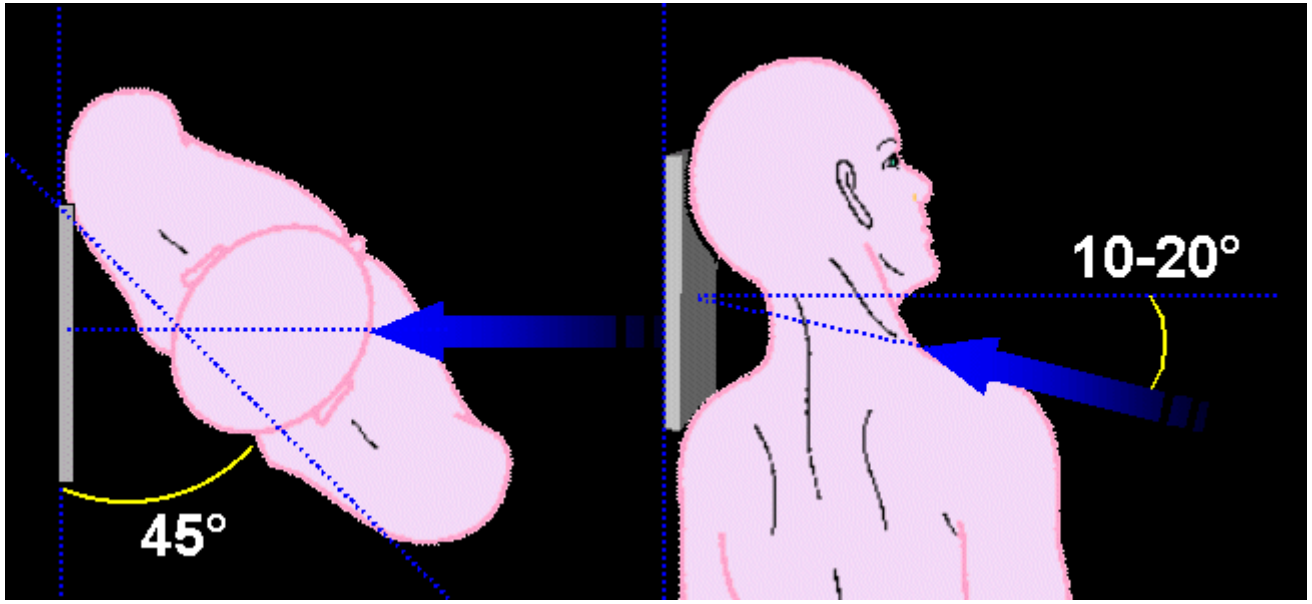
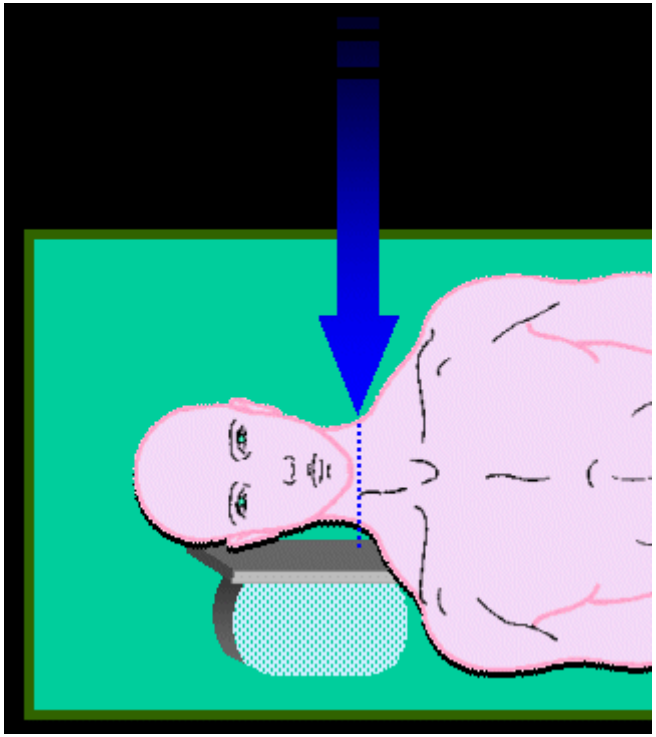
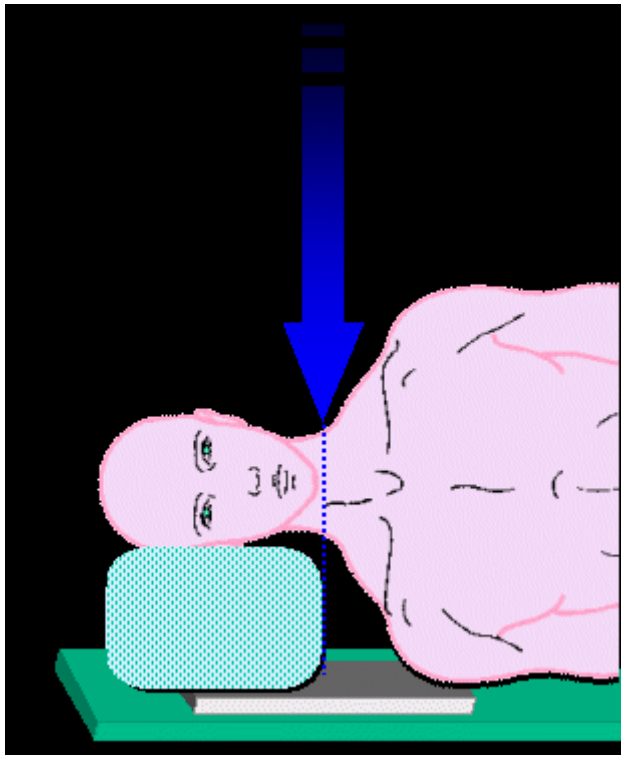
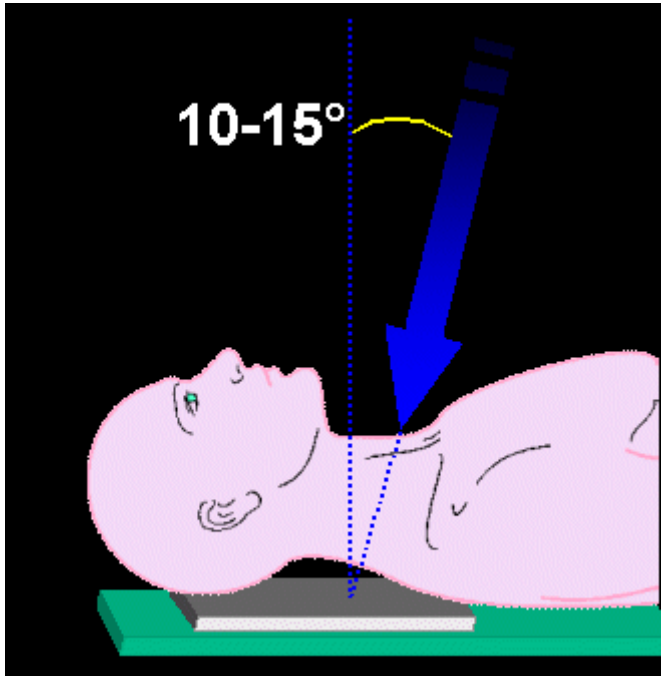
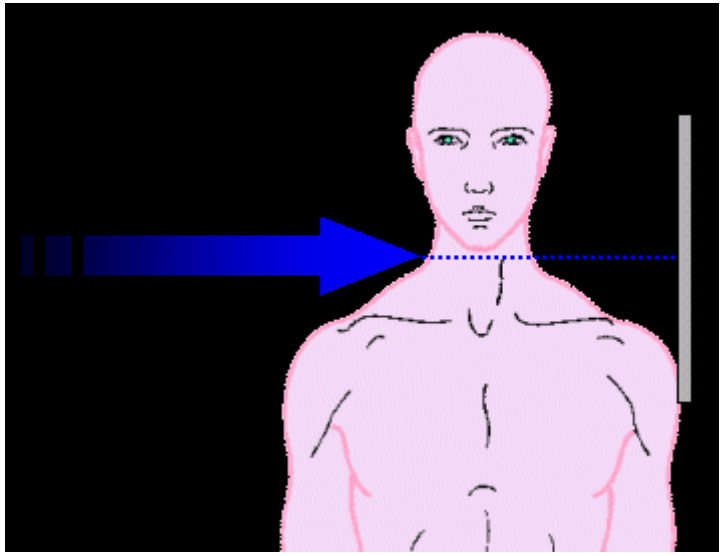

45°
10-20°

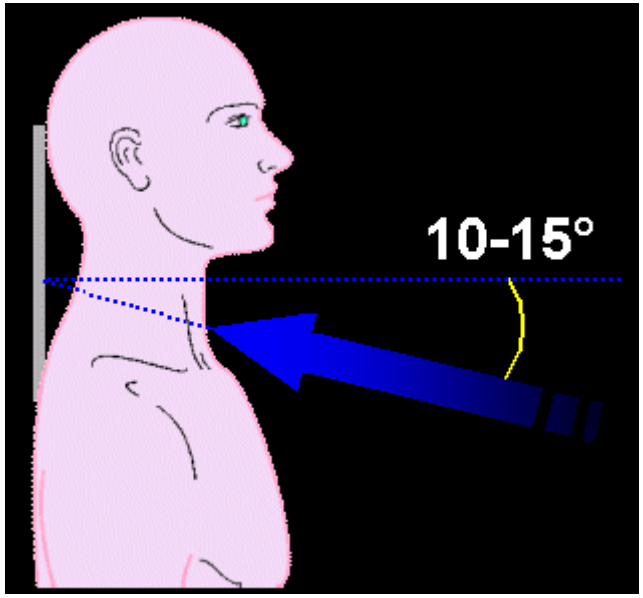

45°
10-20°

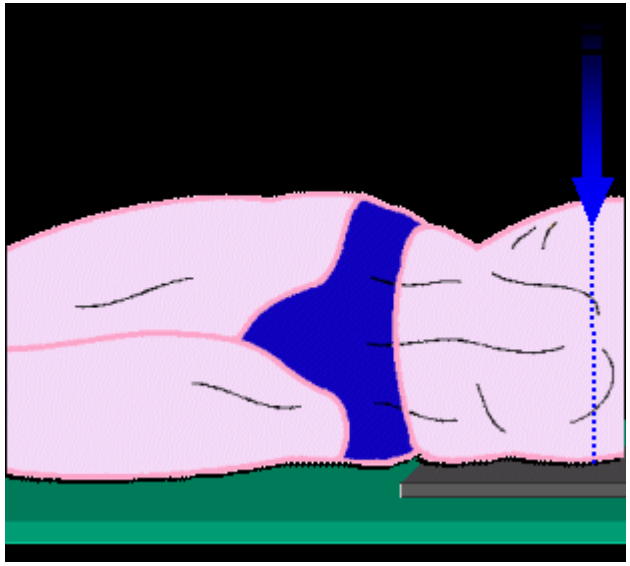


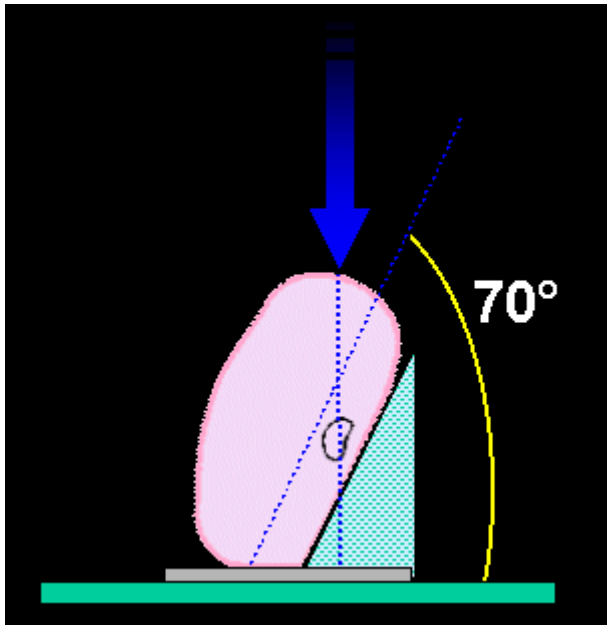


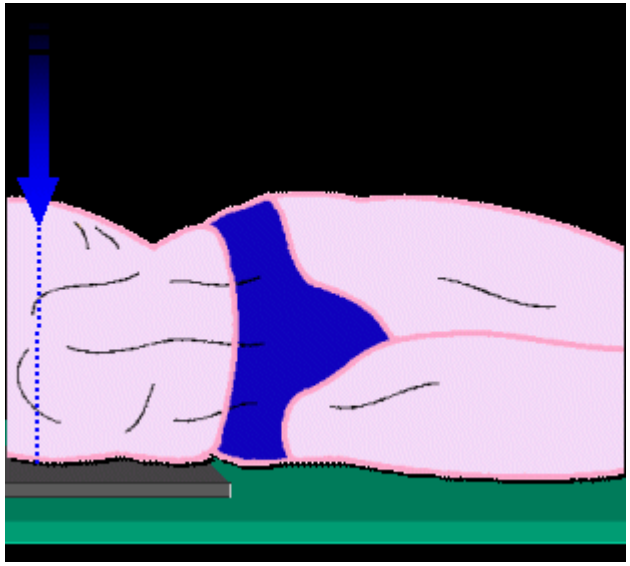

10-15°




10-15°




70°



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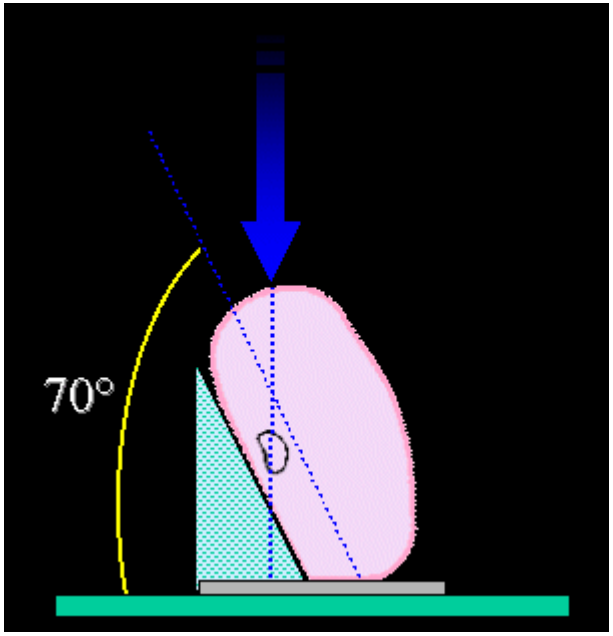
70°
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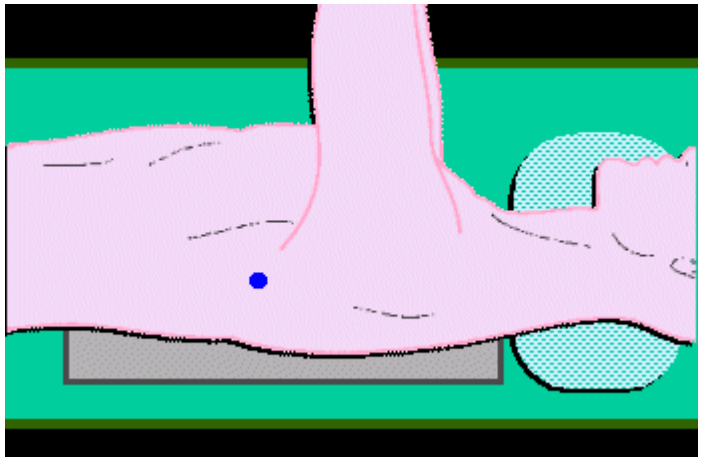

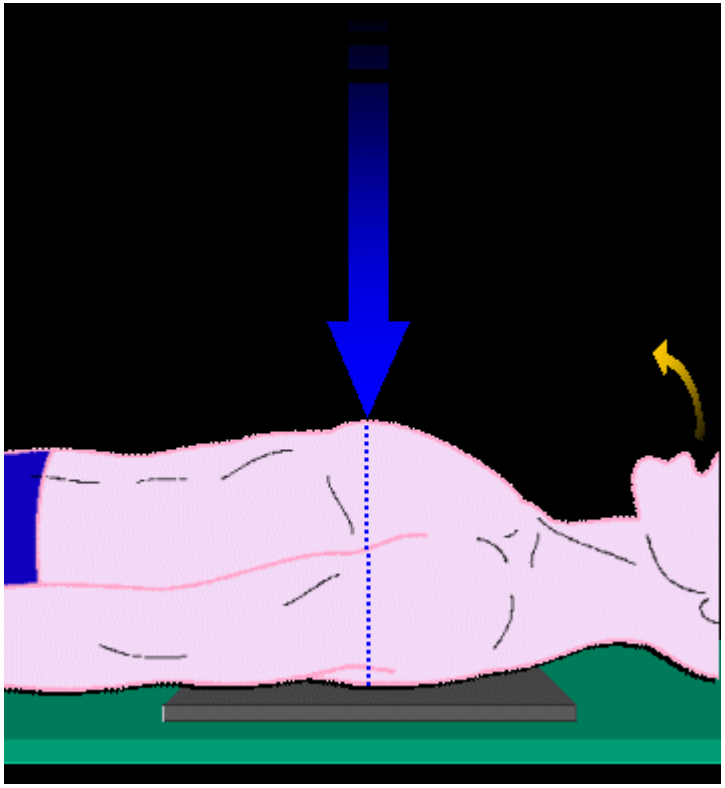

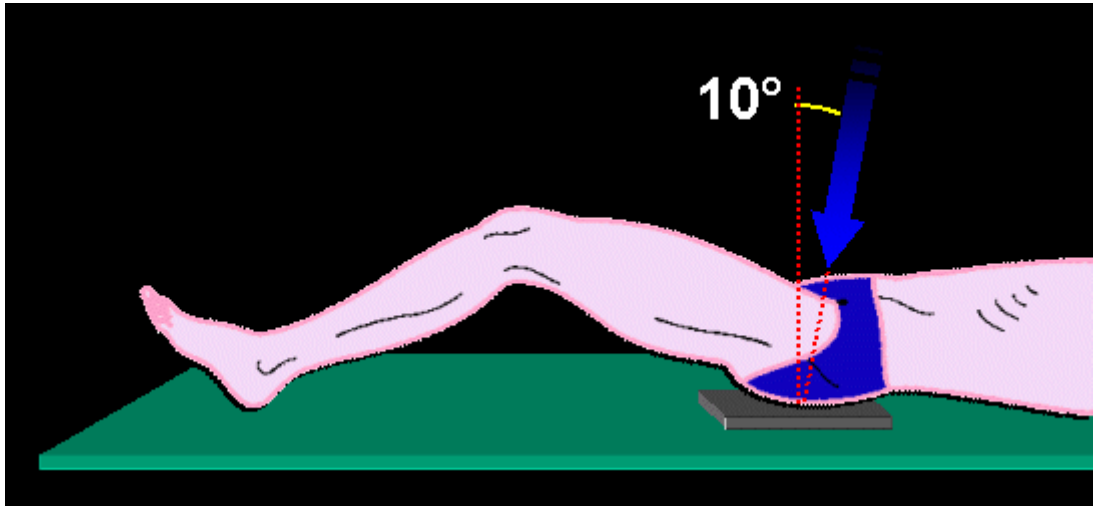
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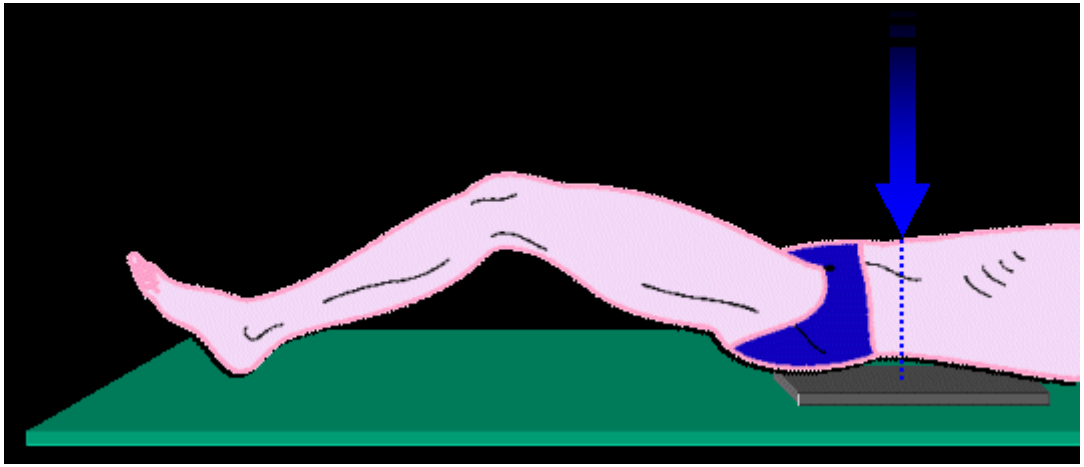

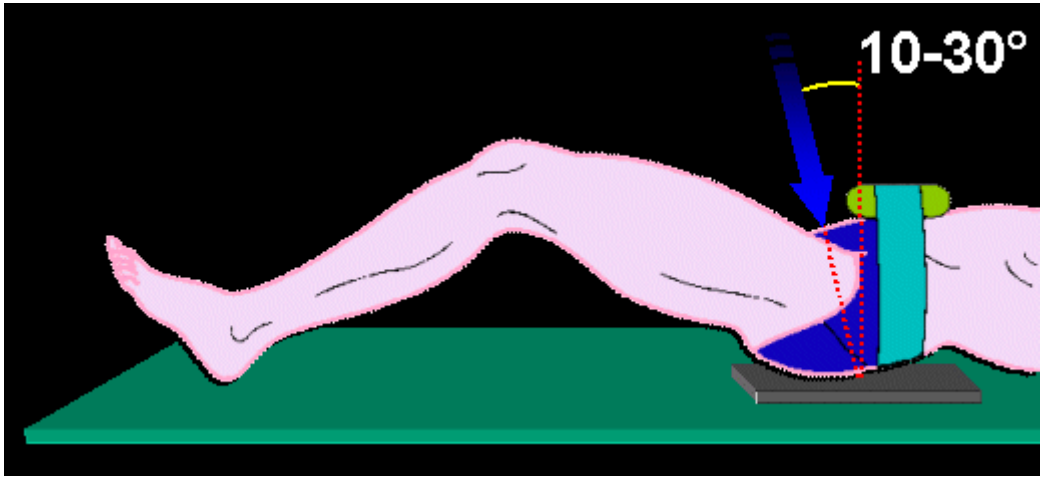
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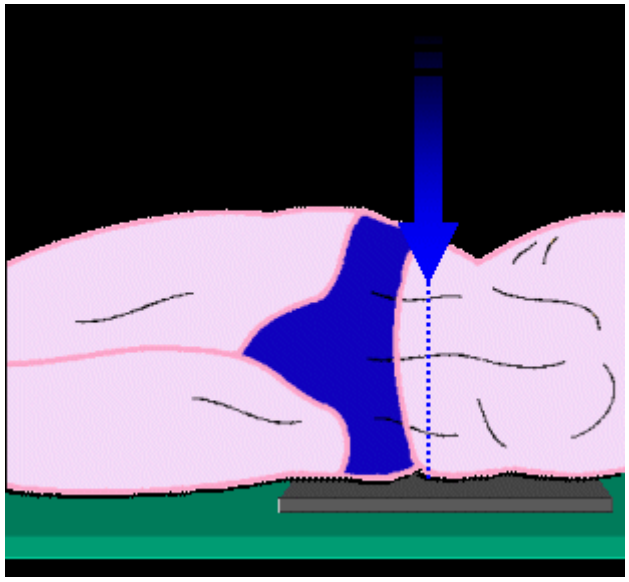

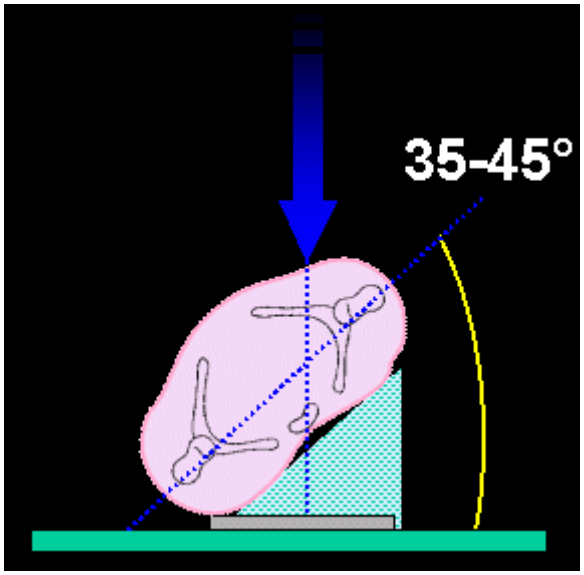
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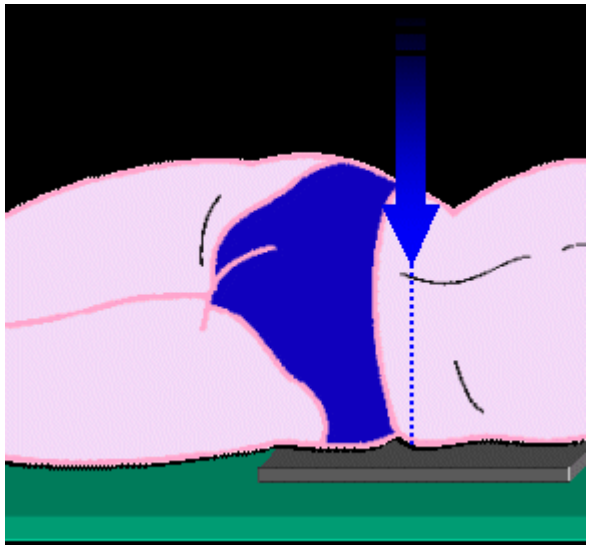

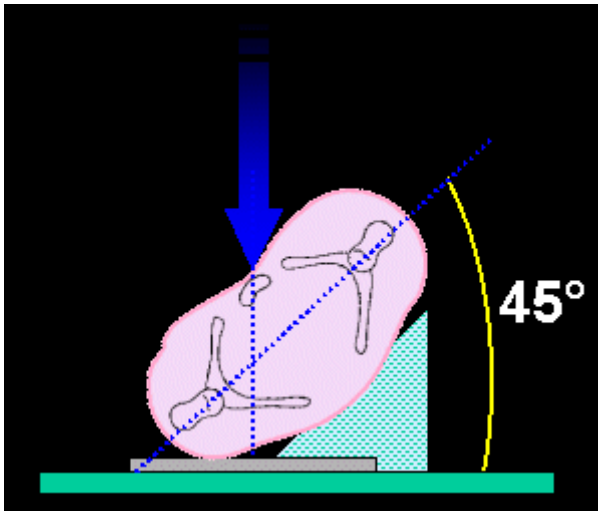
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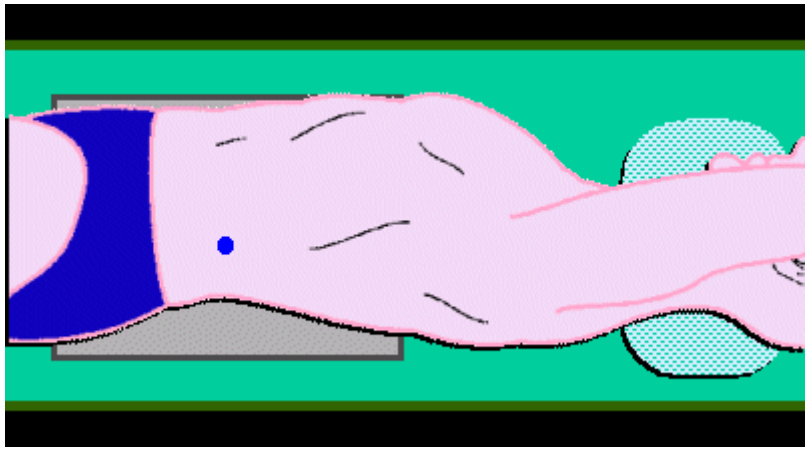

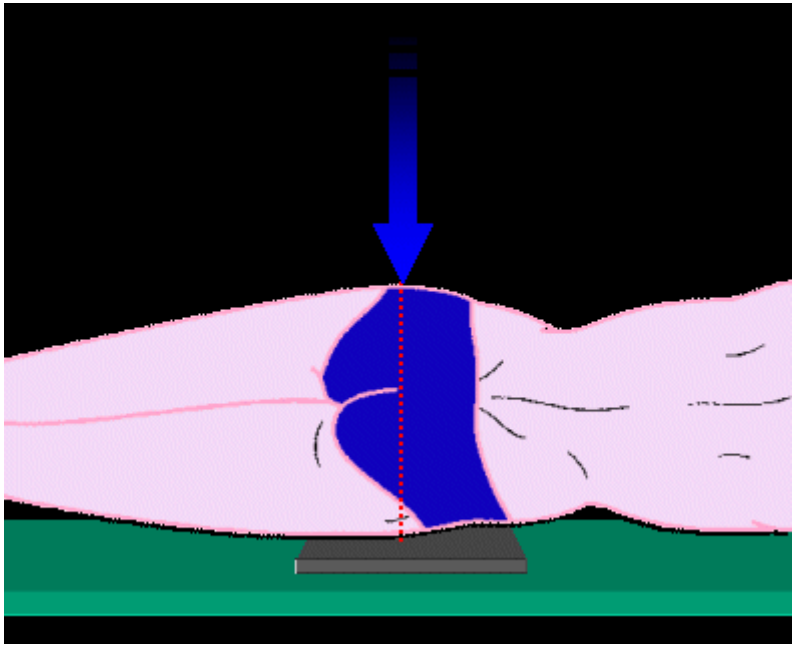

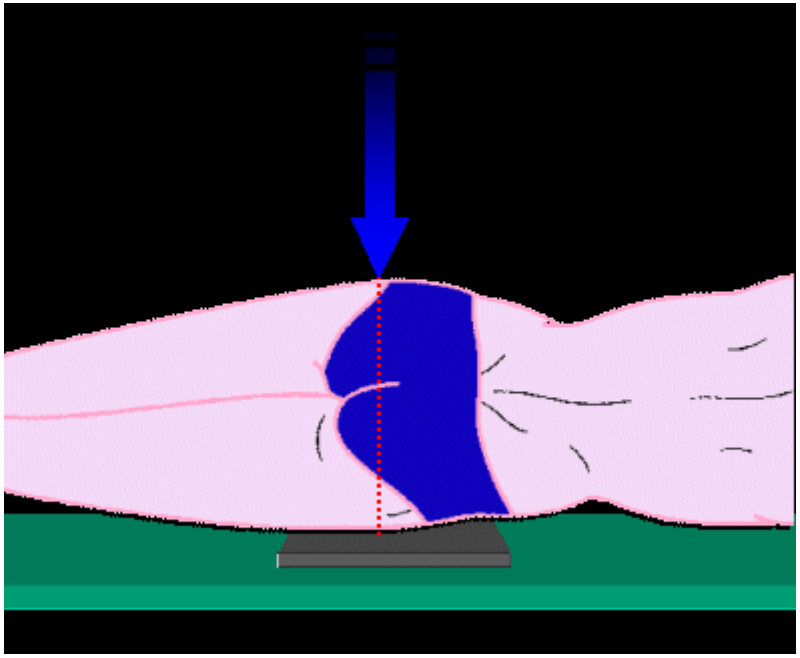

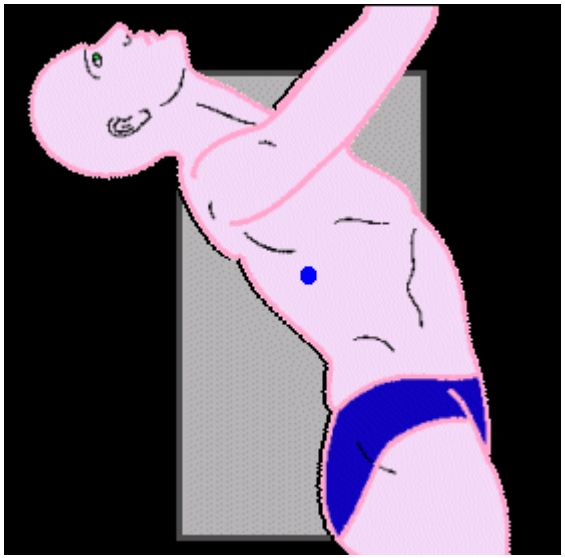

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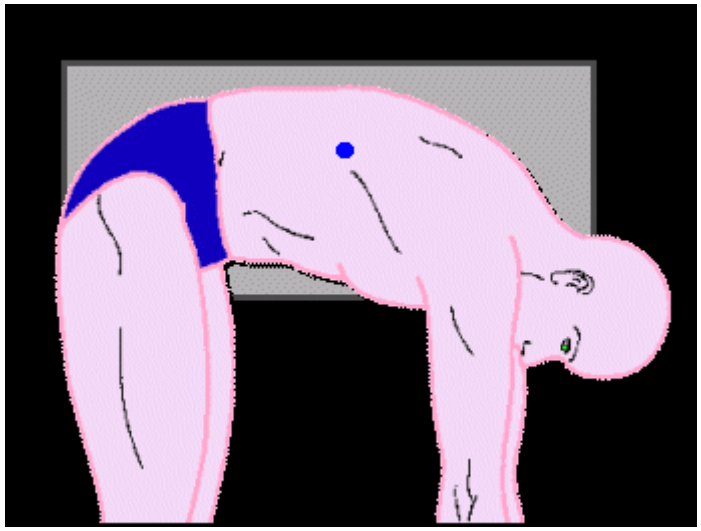

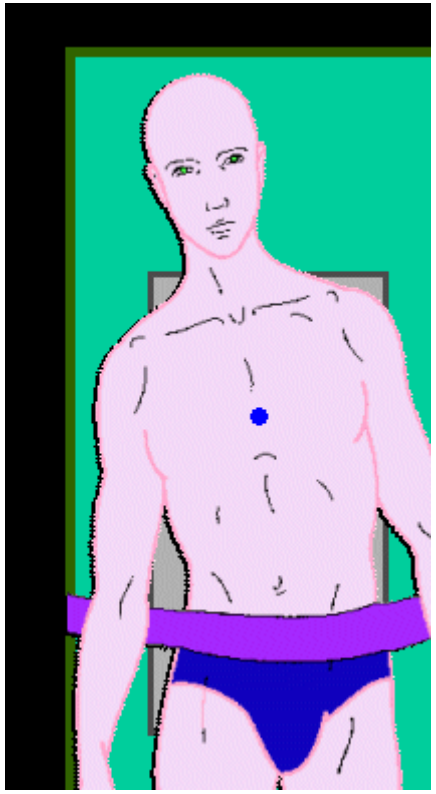

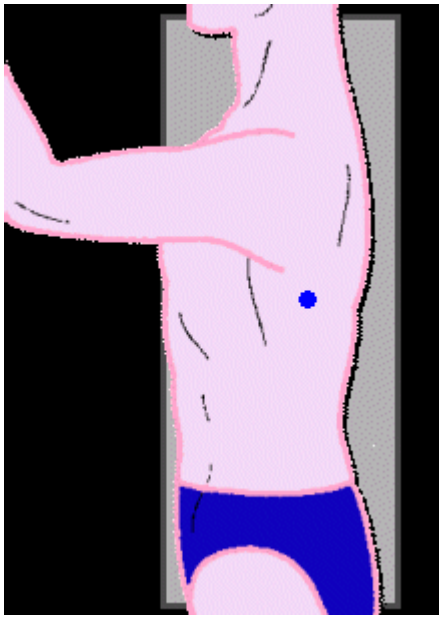

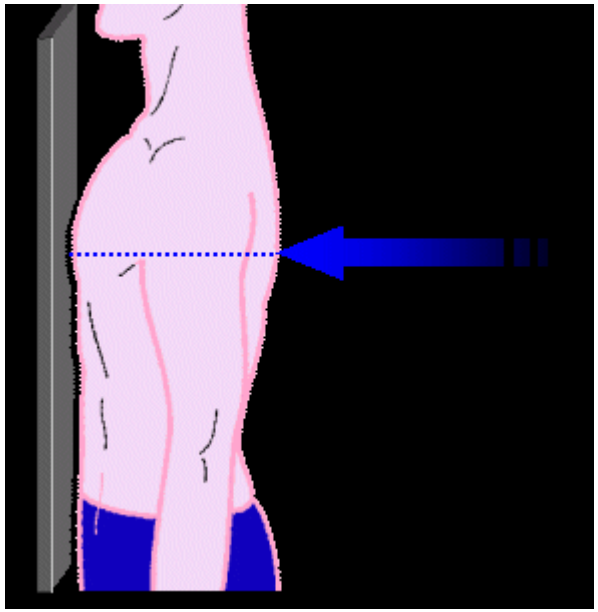

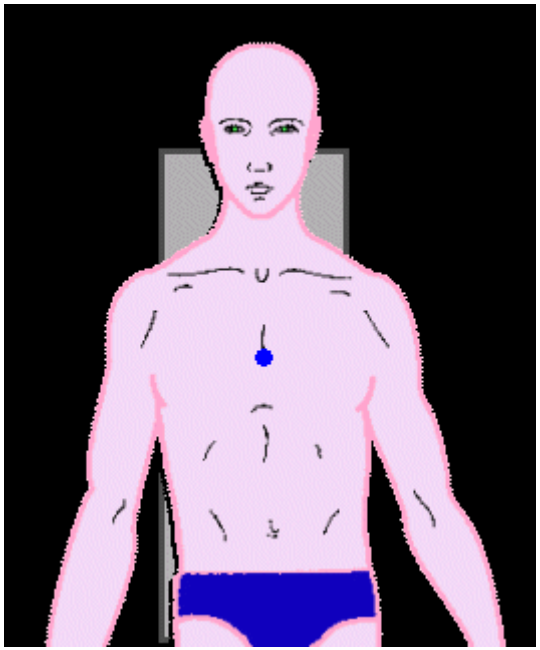

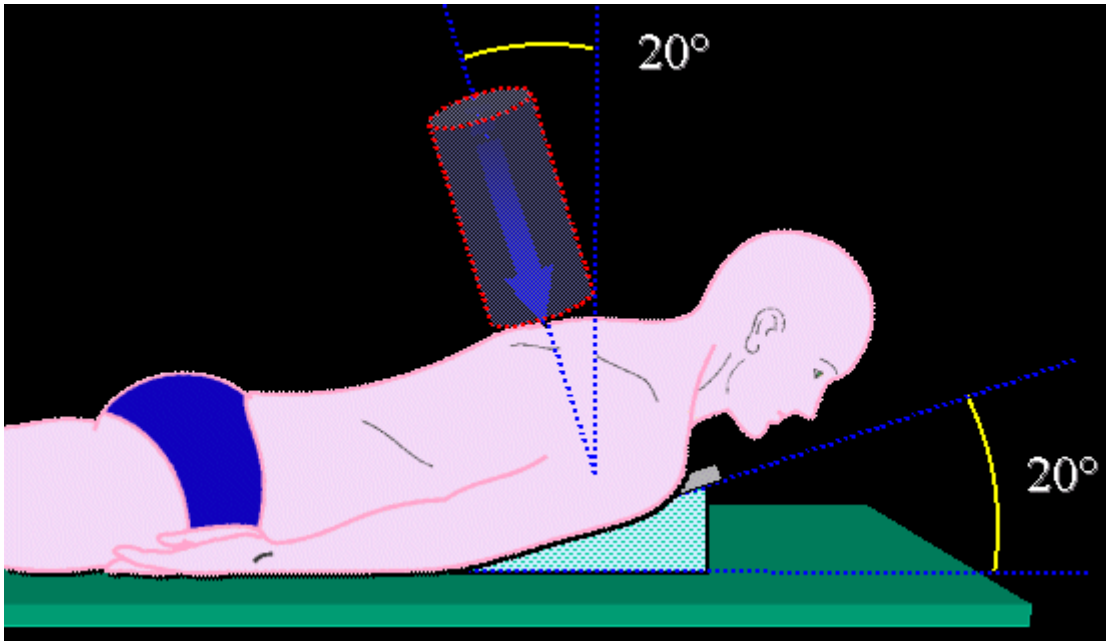
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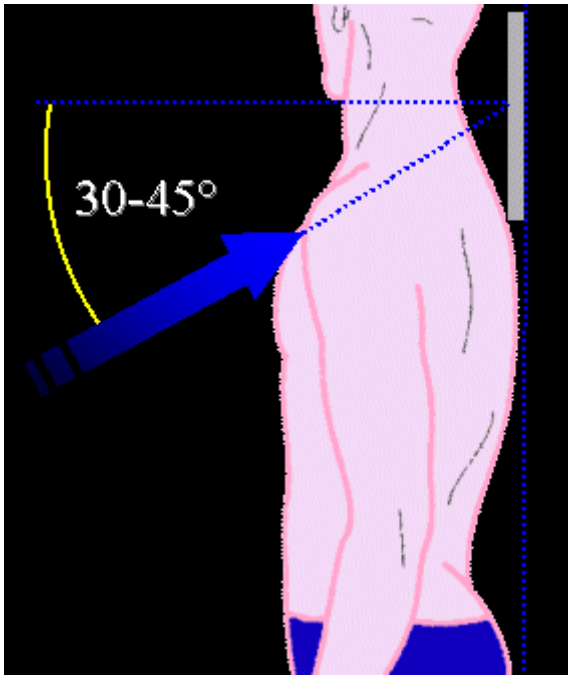
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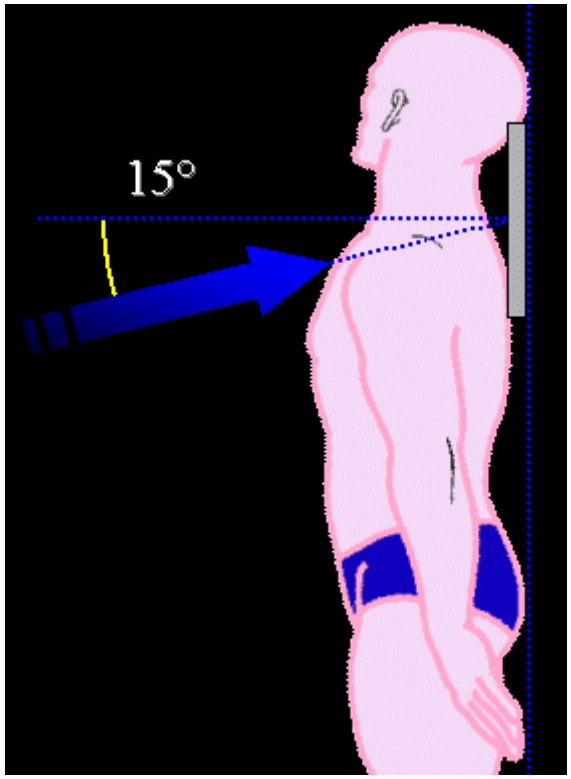
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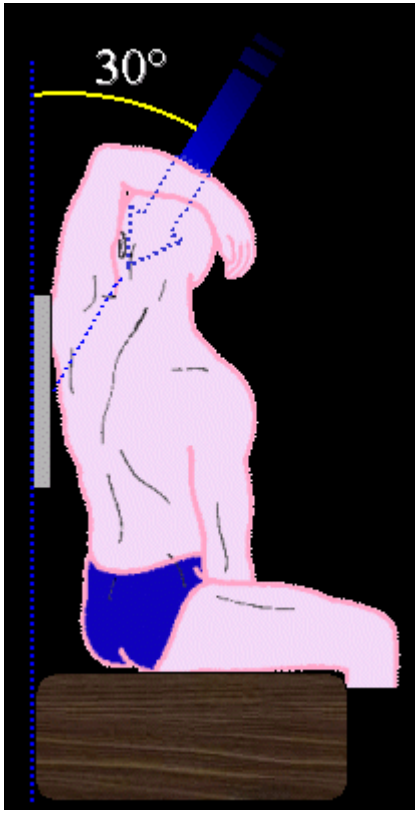
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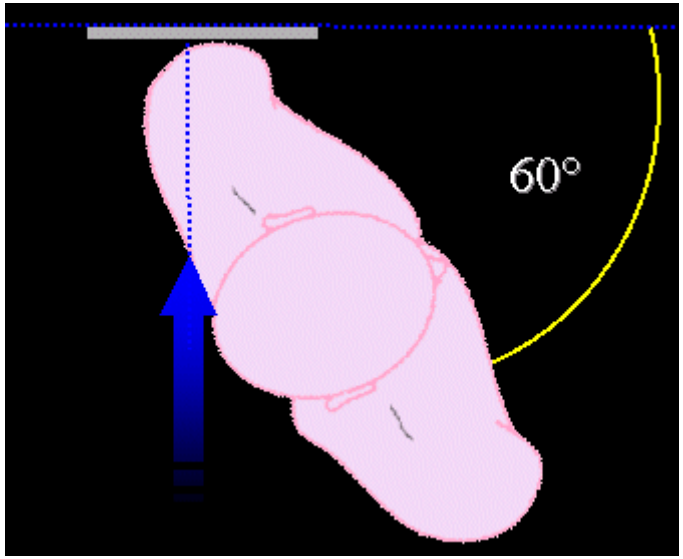
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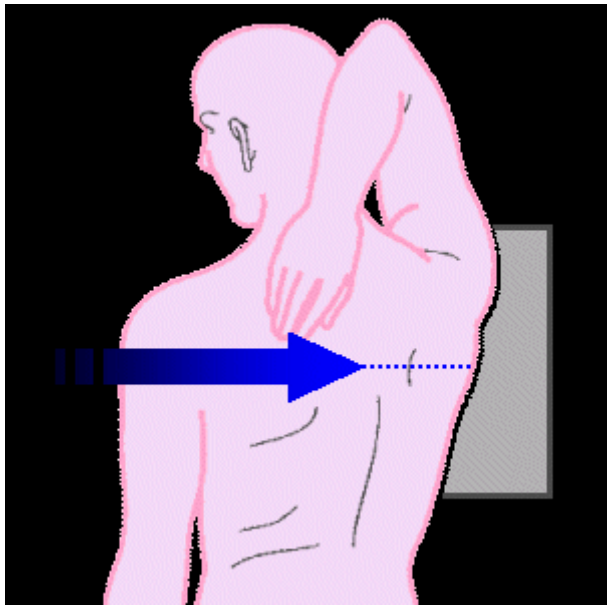

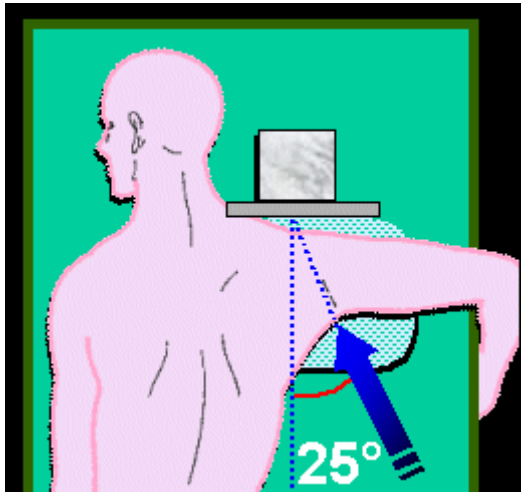
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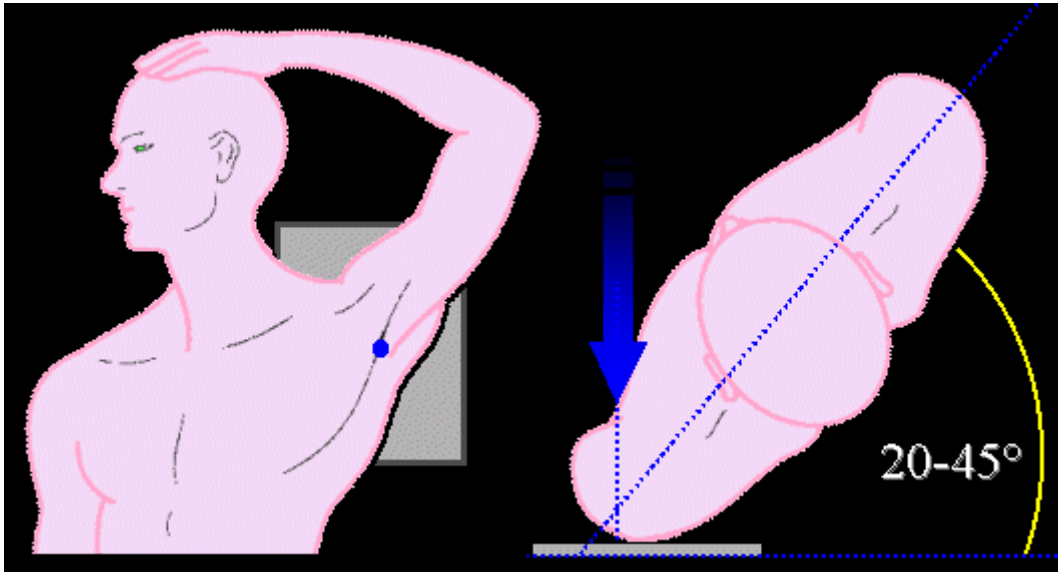

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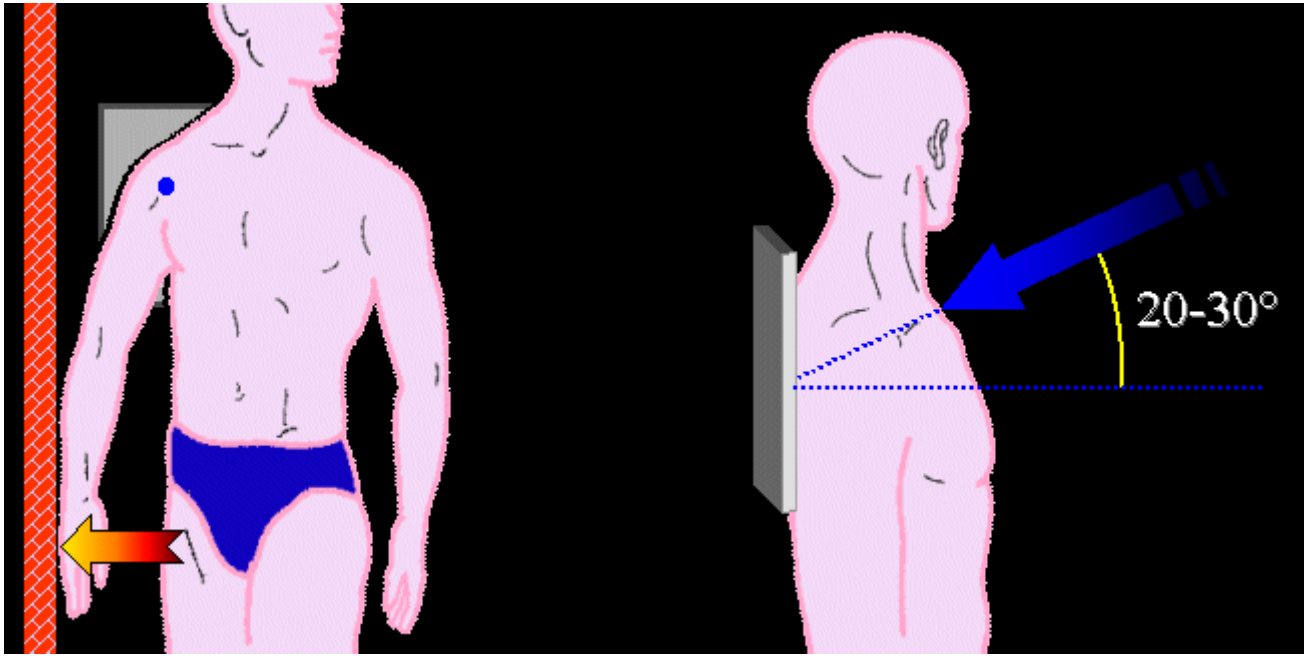
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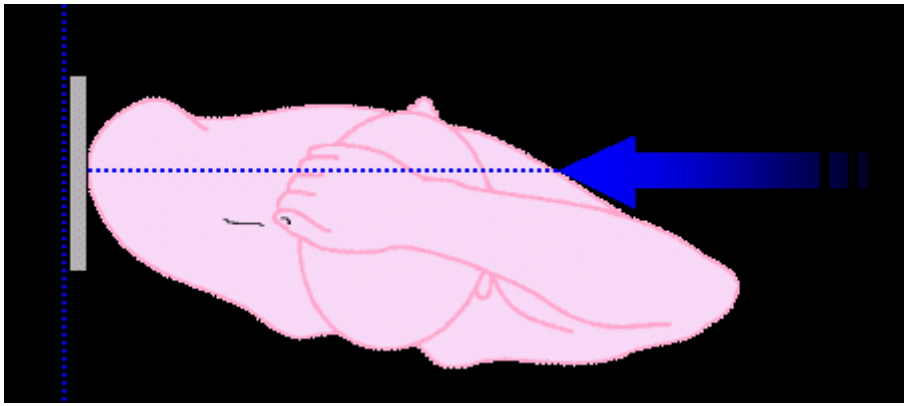

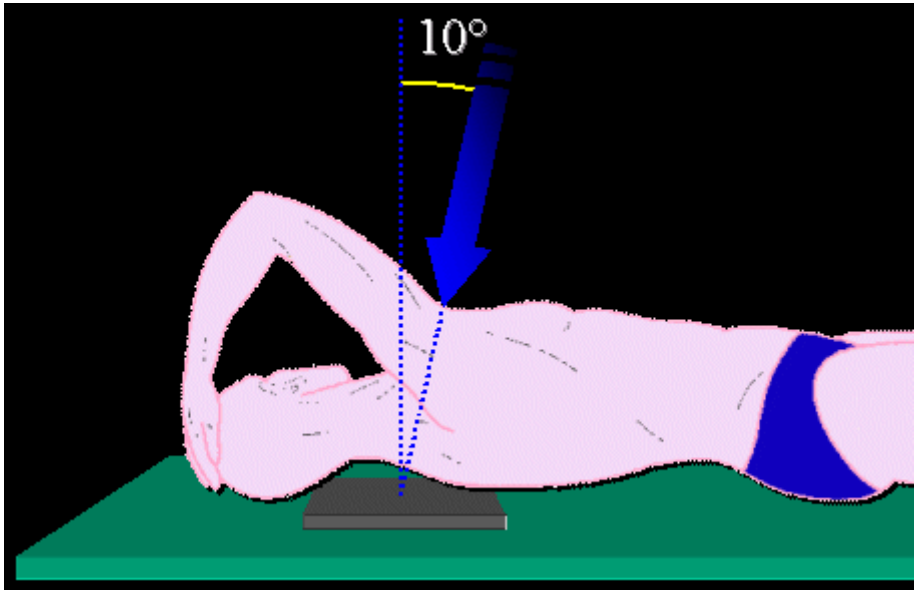
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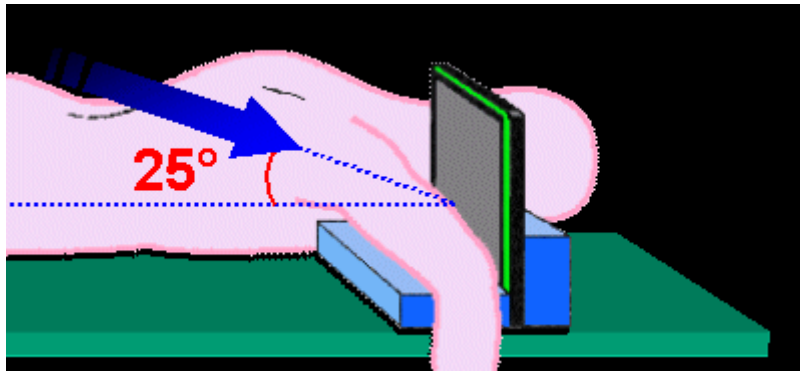
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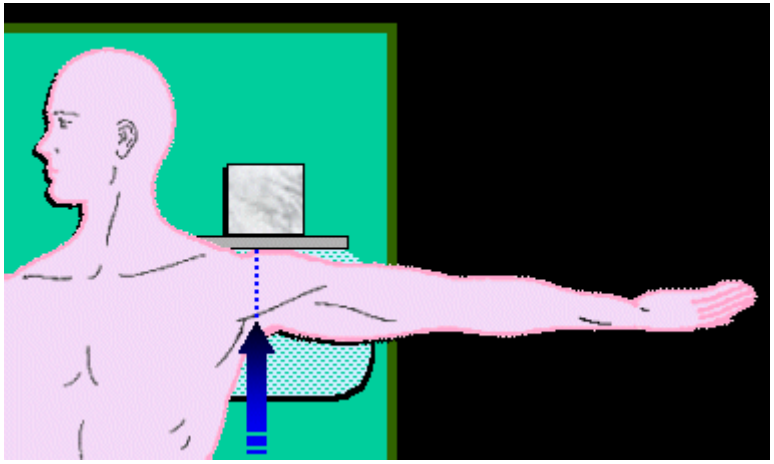

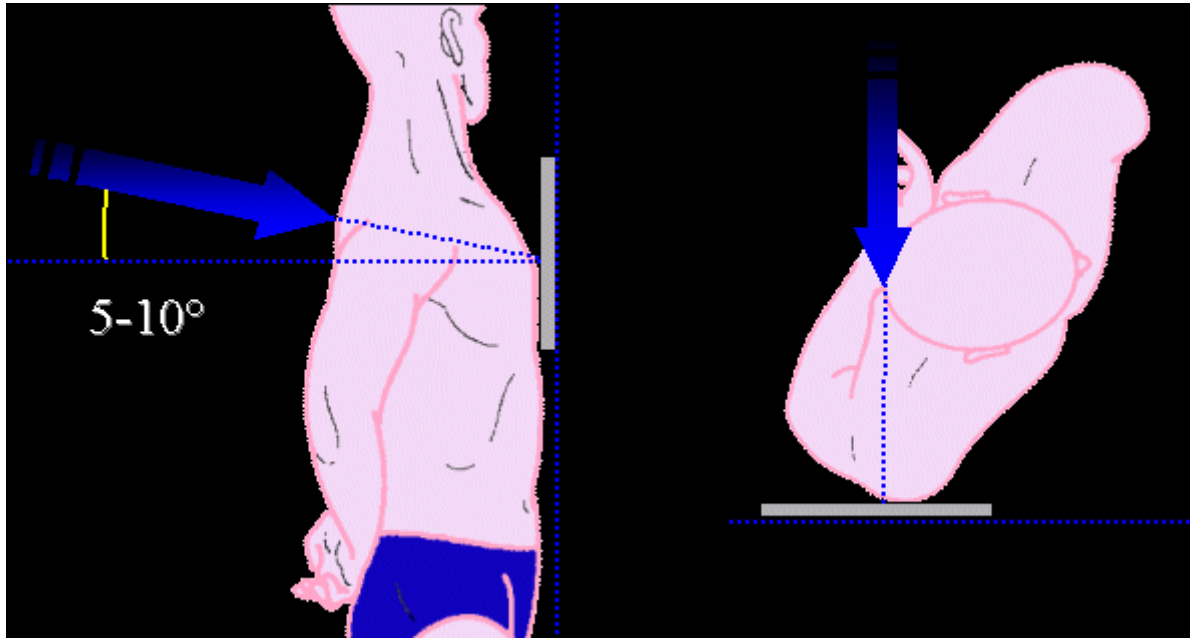
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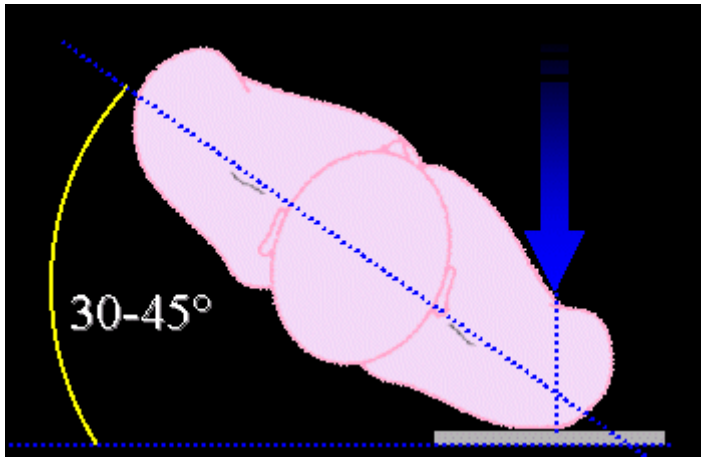
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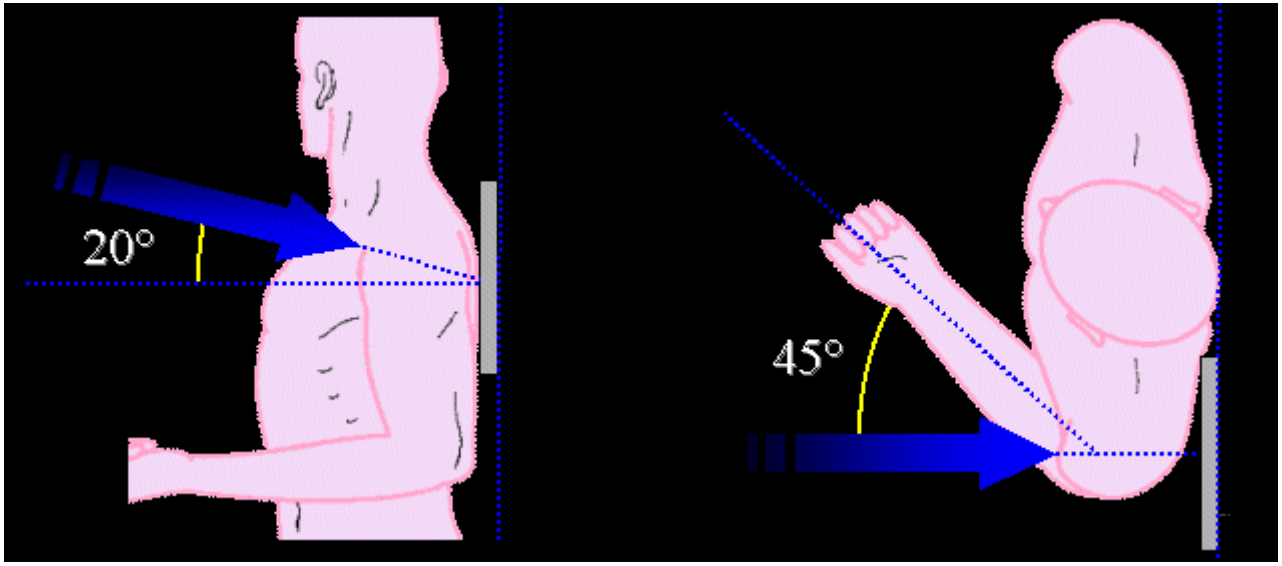
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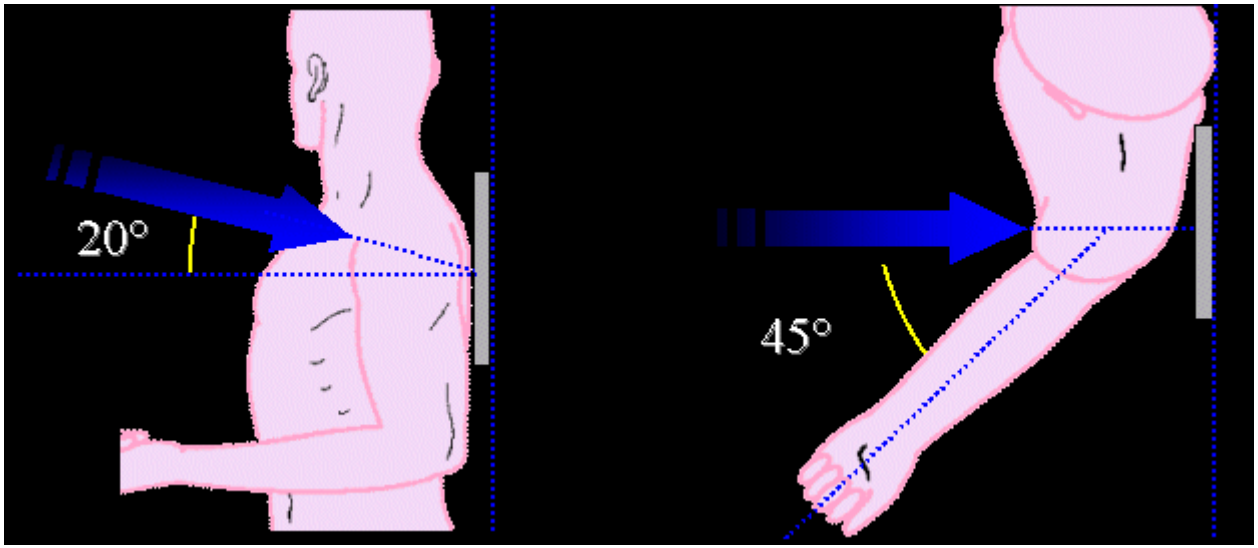
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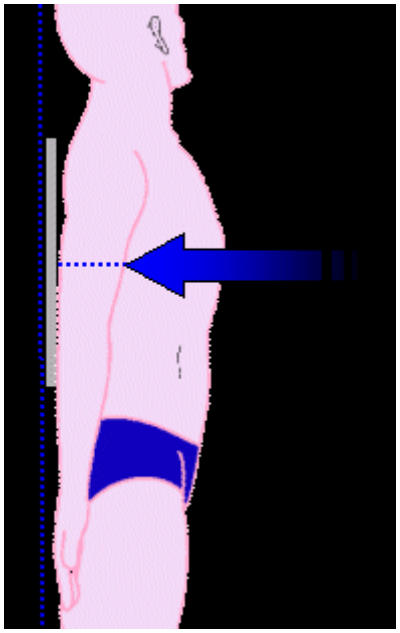

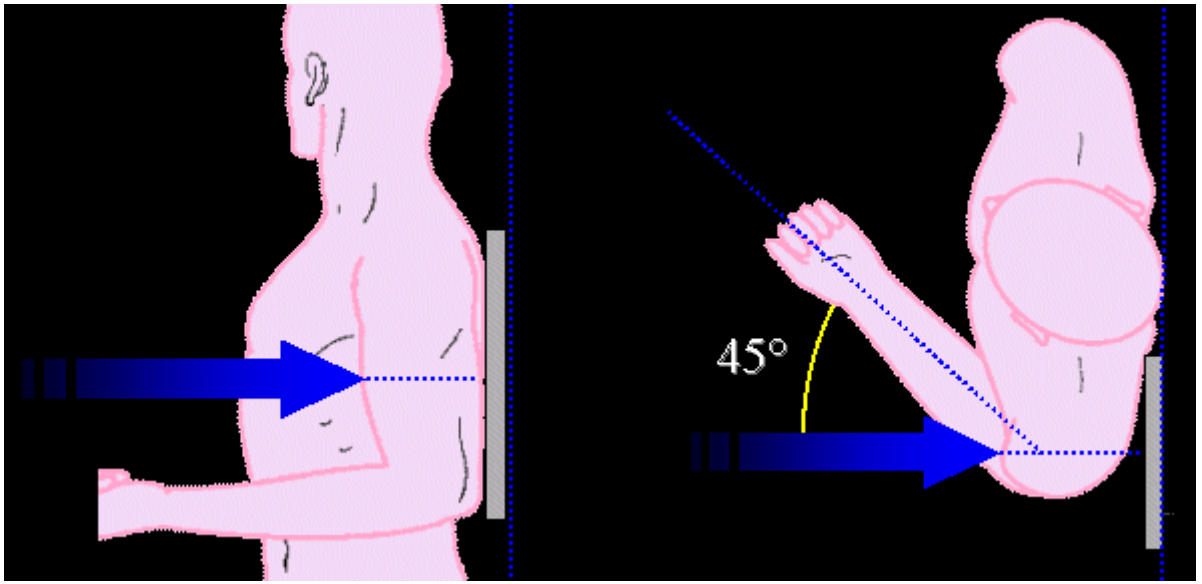
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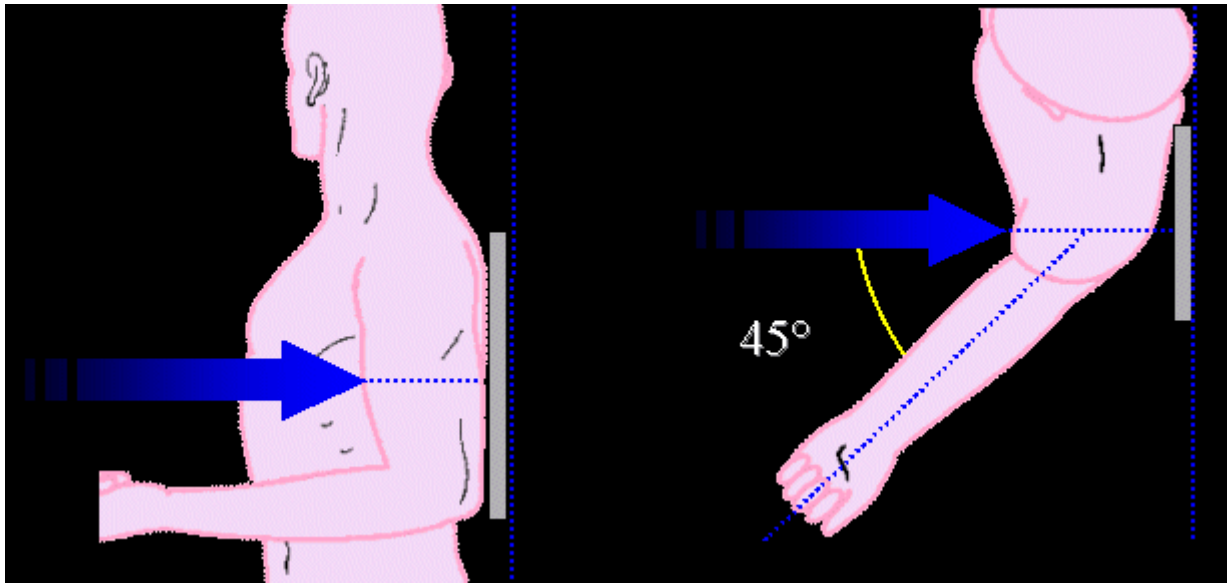
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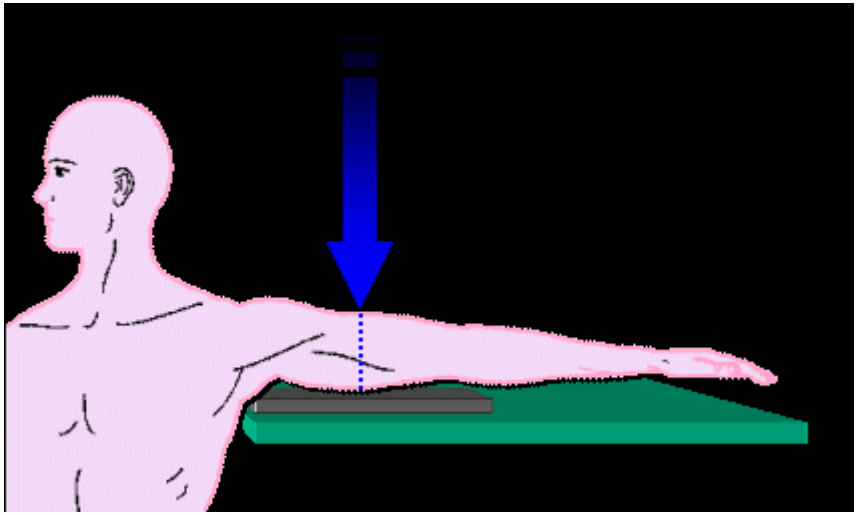

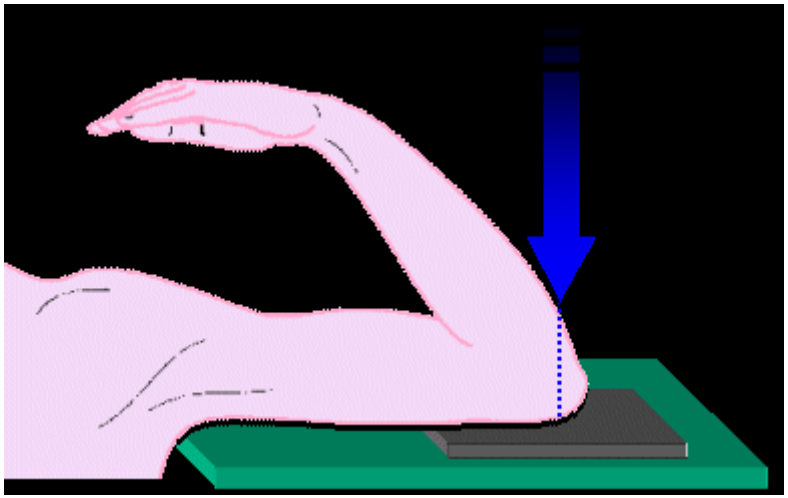

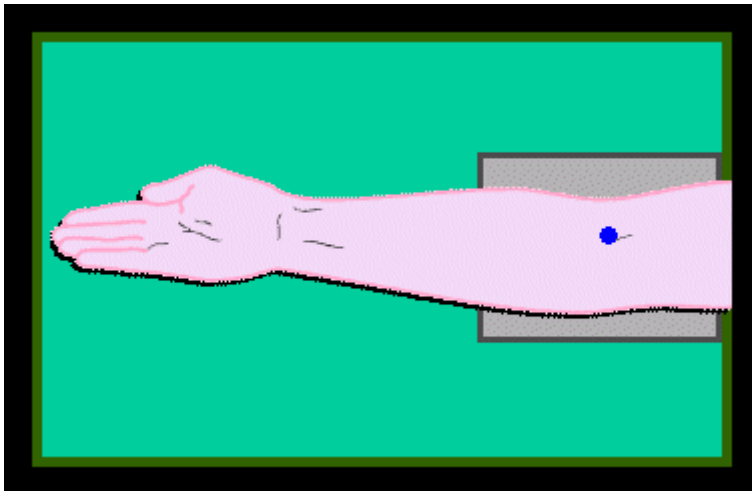

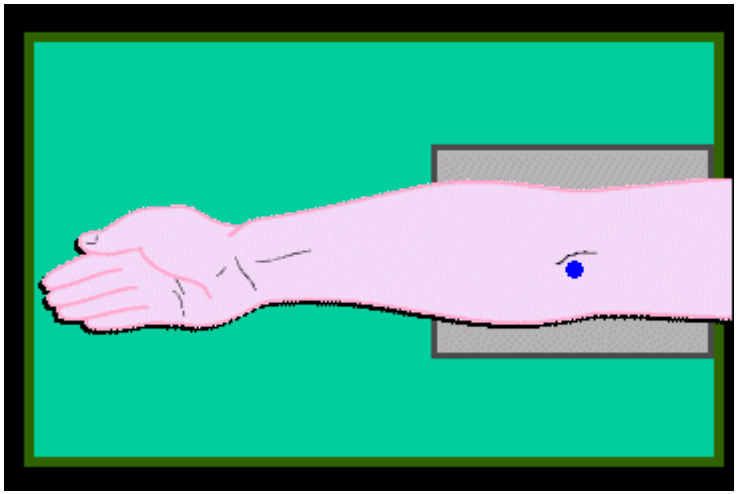

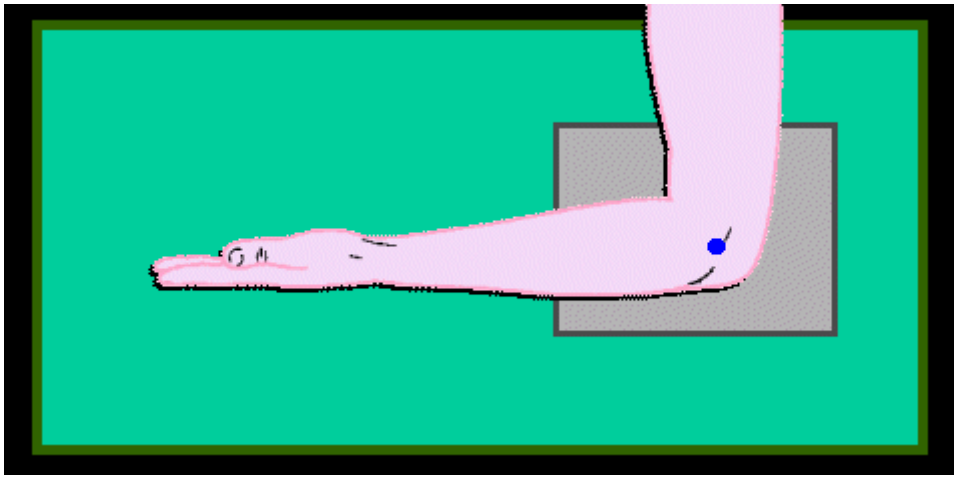

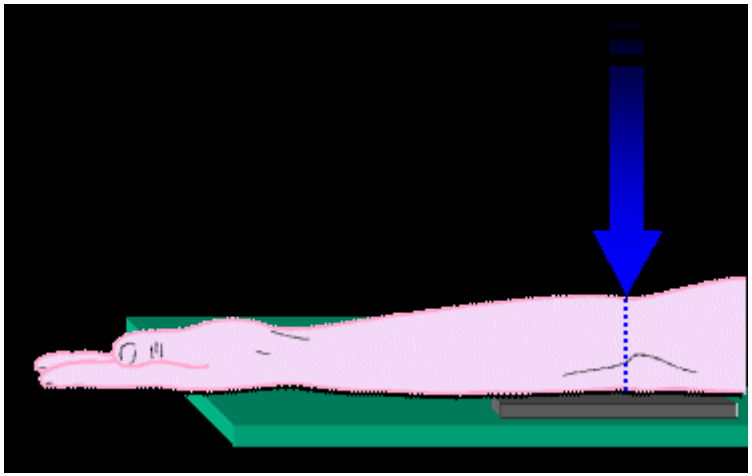

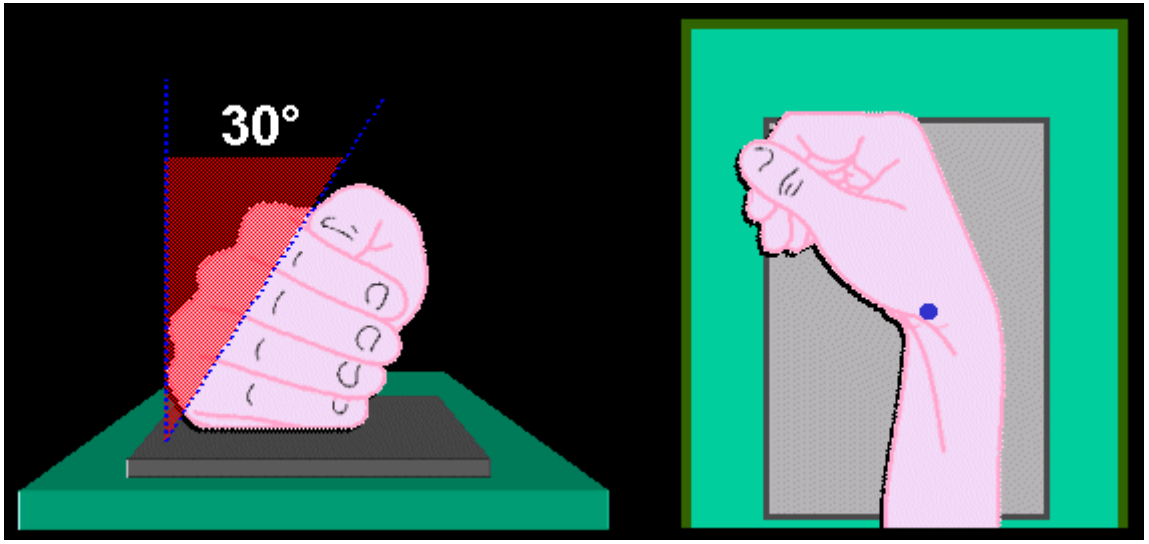

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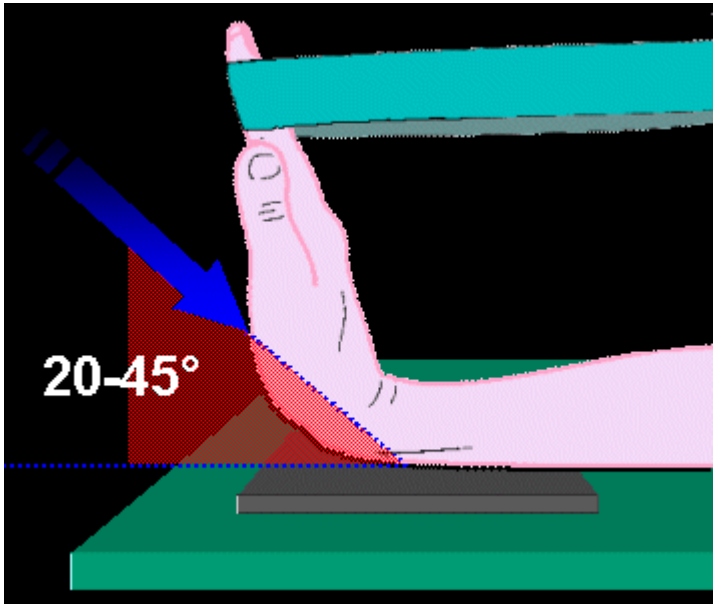
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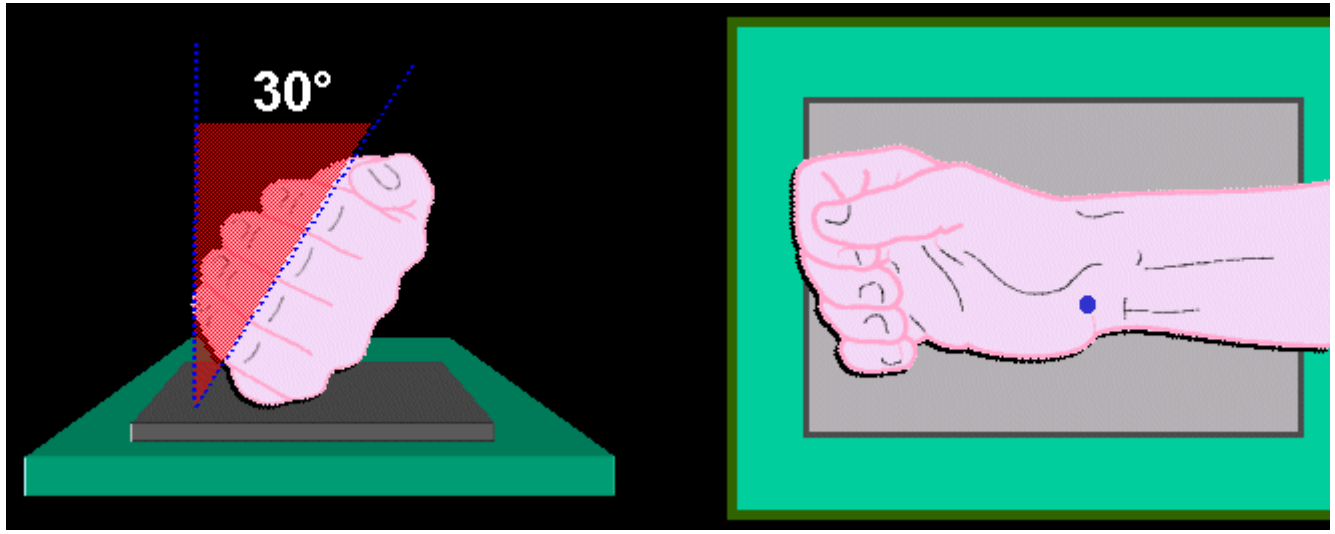
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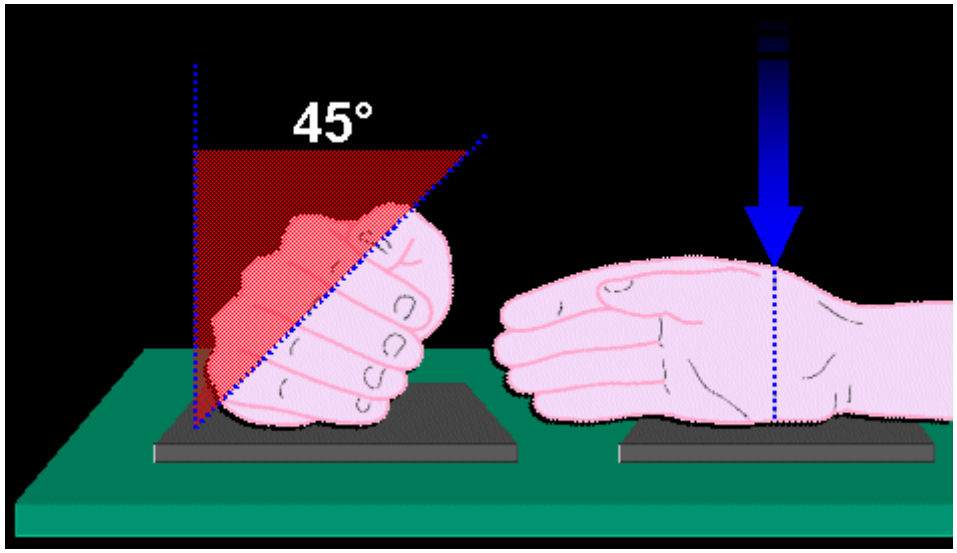
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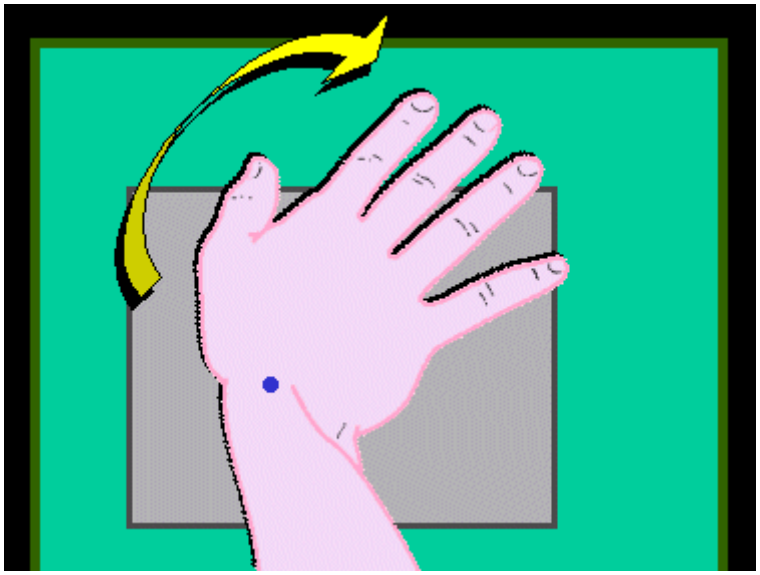

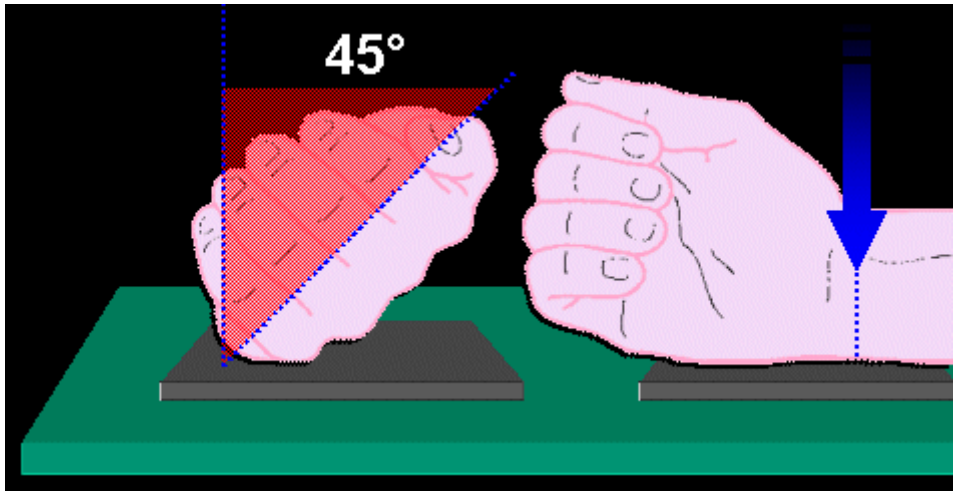
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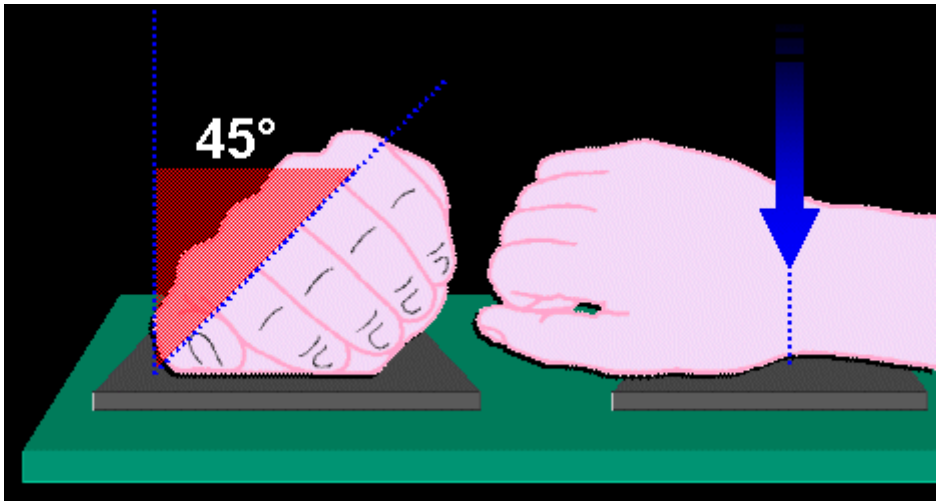
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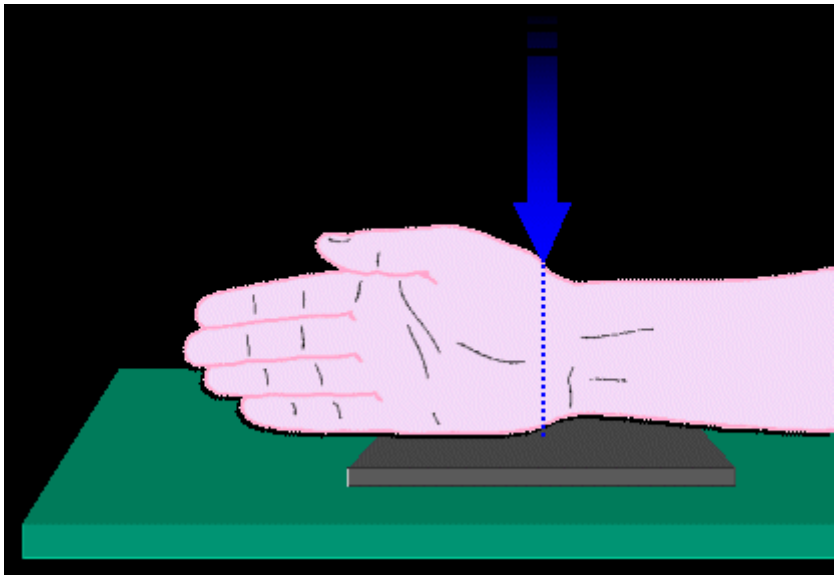

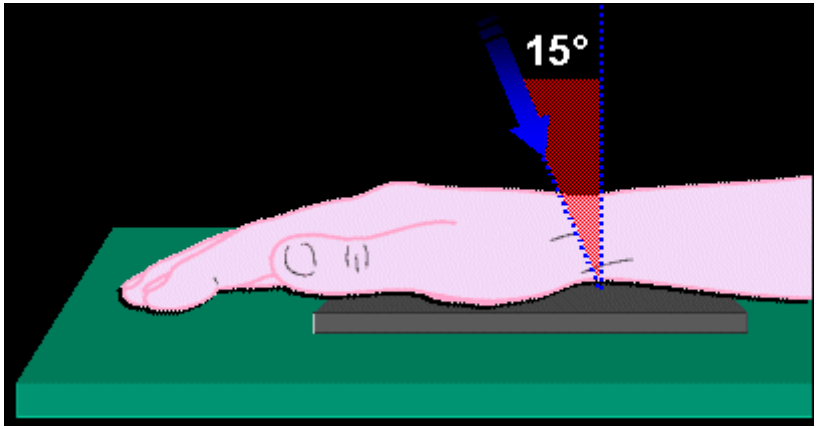
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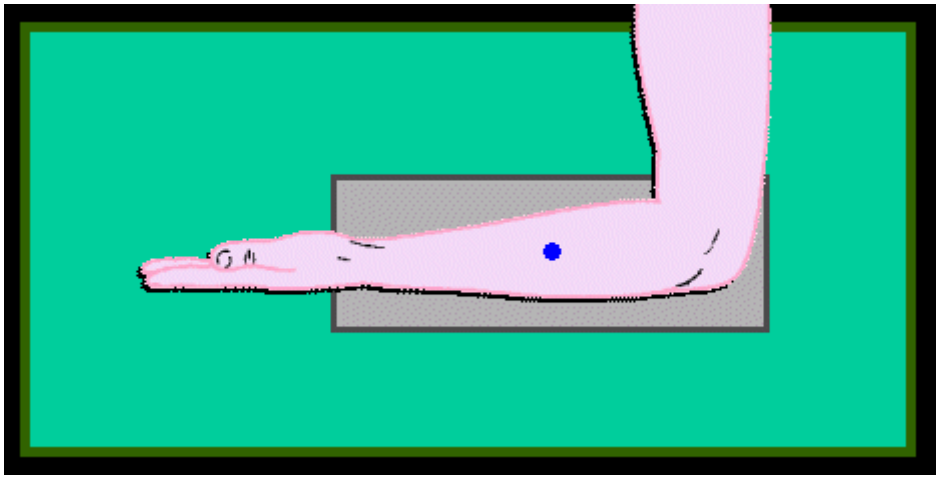

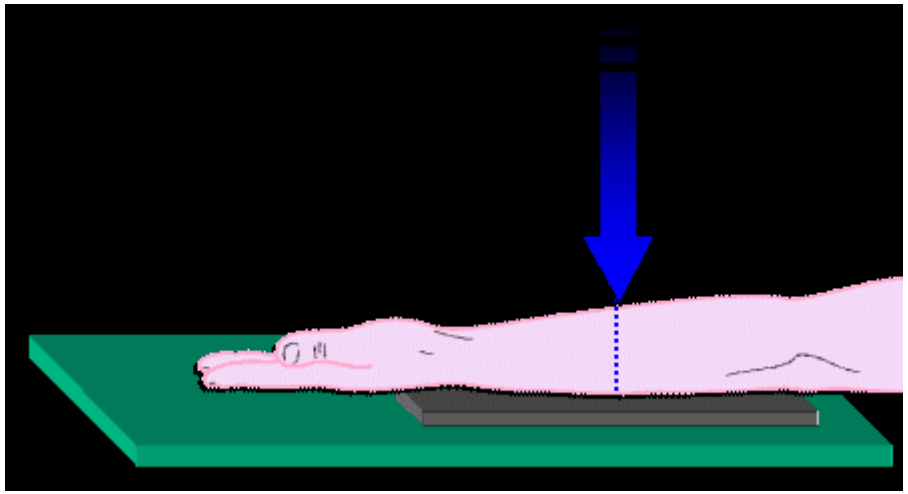

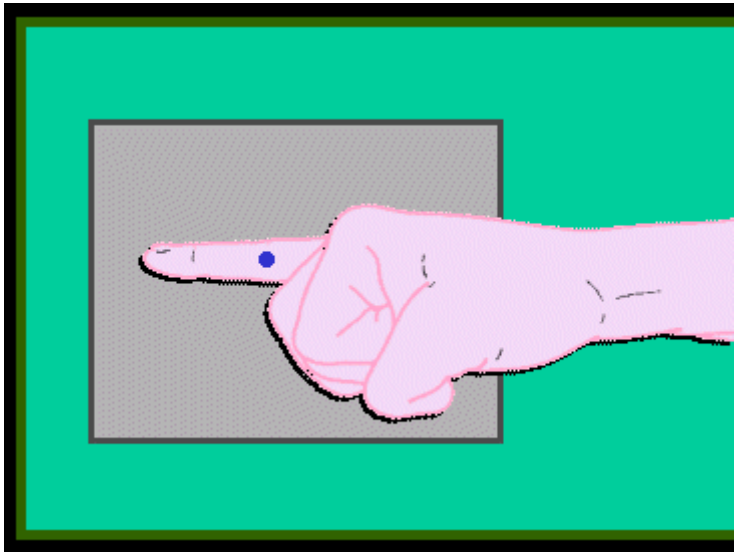

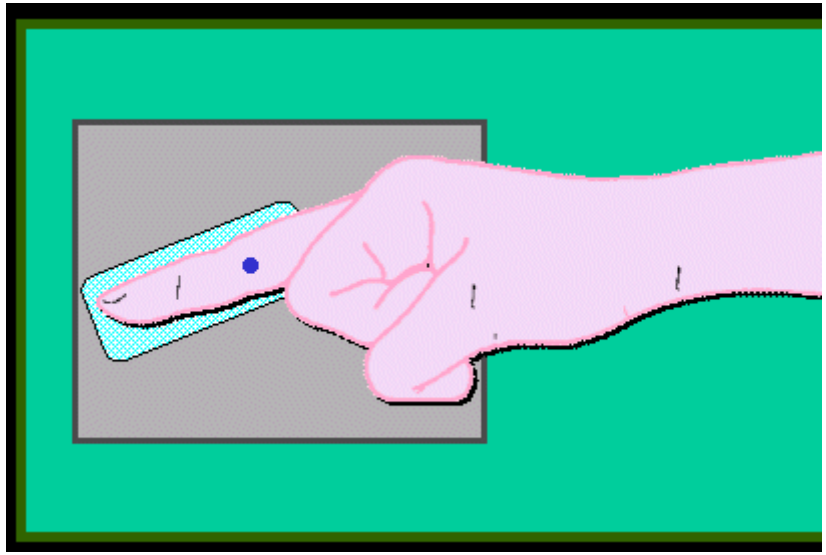

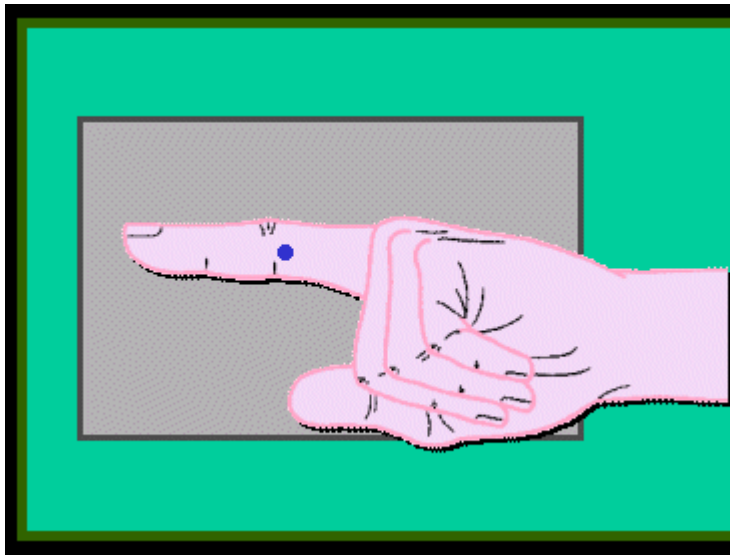

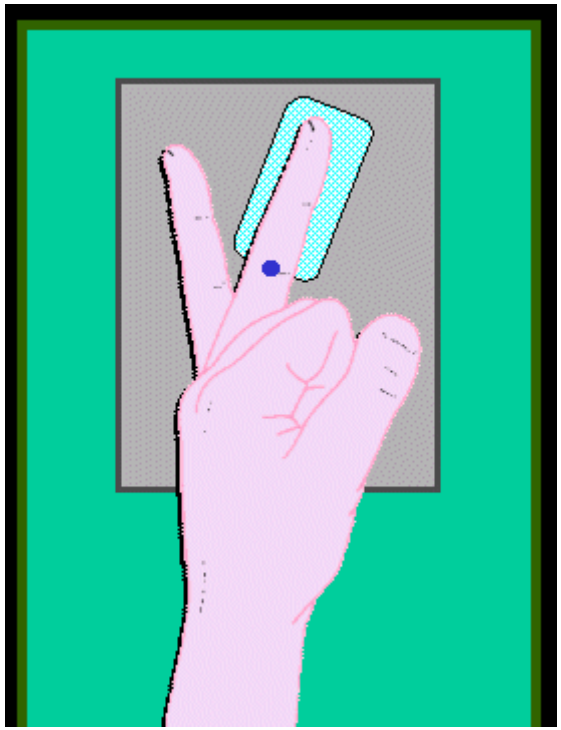

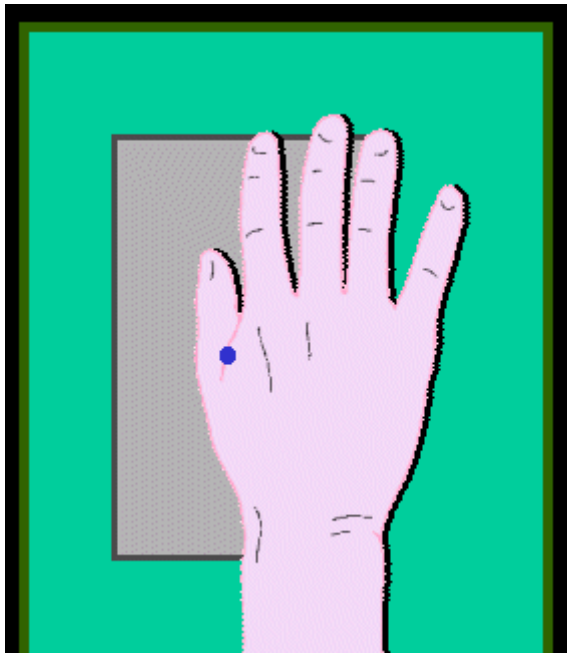

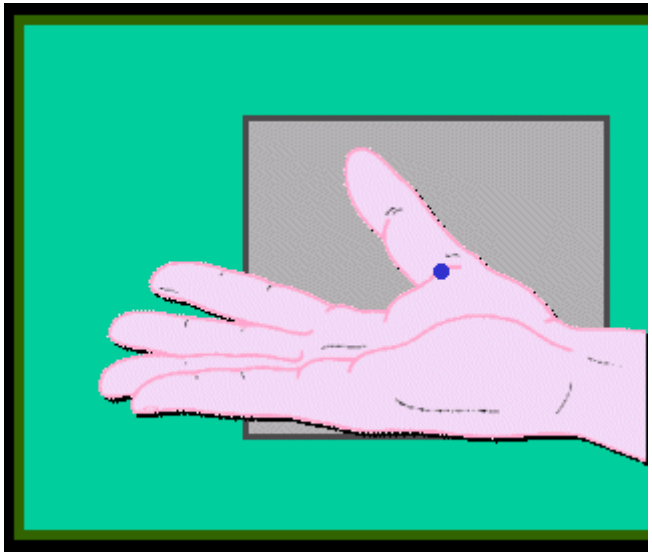

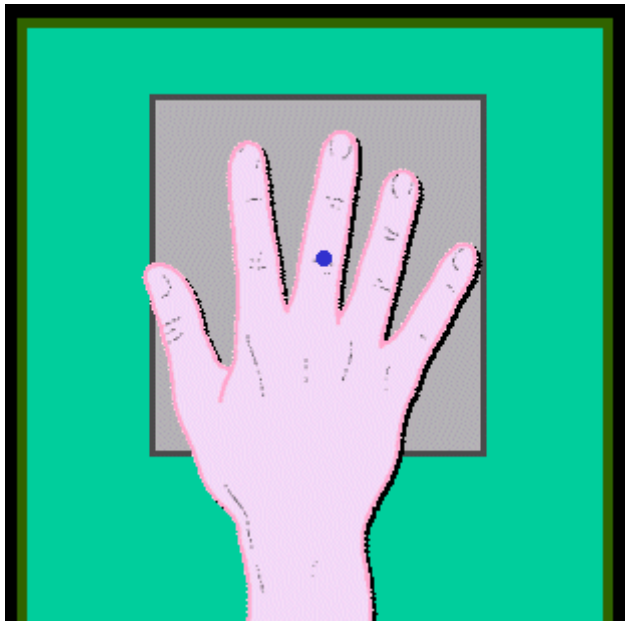

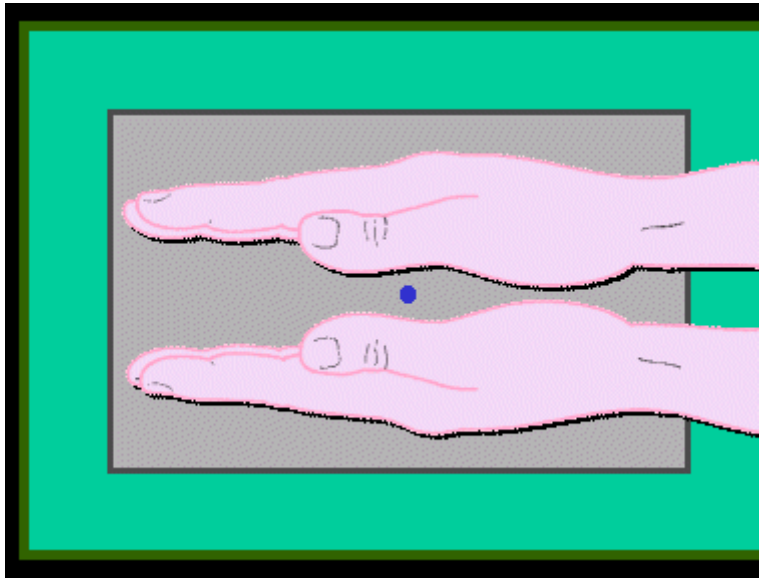

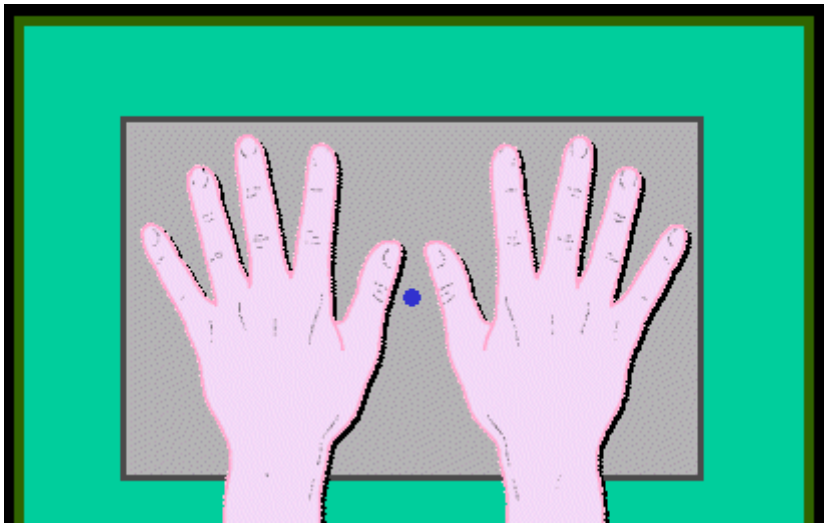

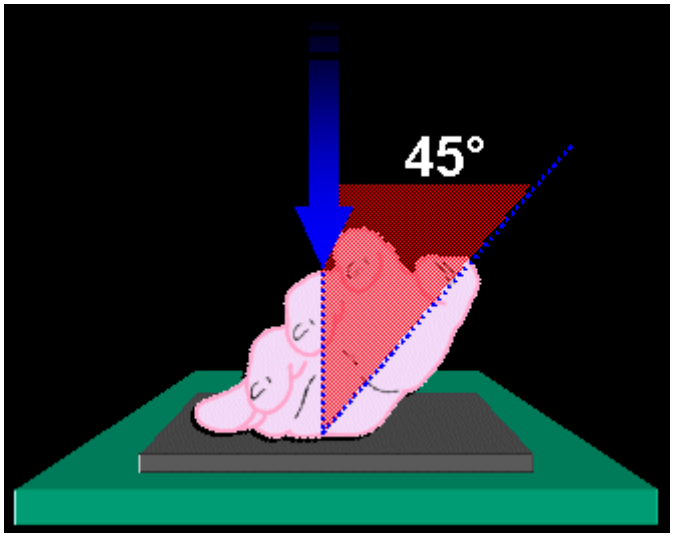
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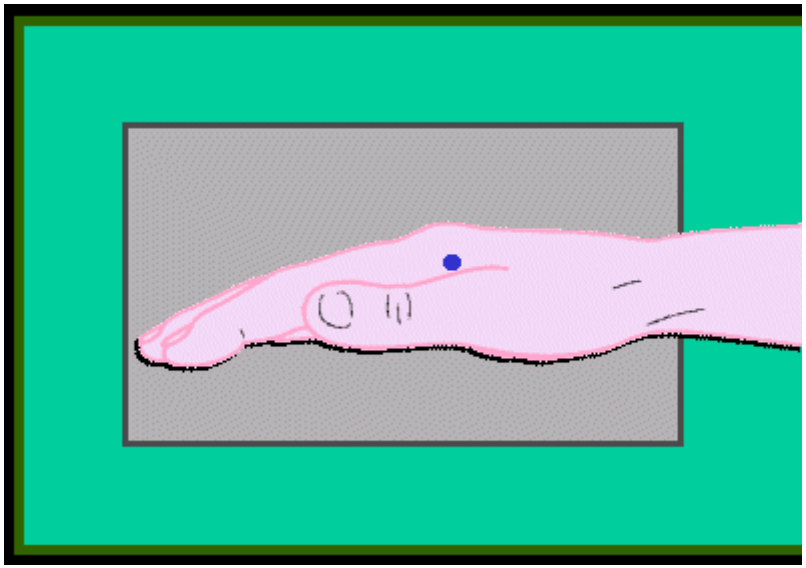

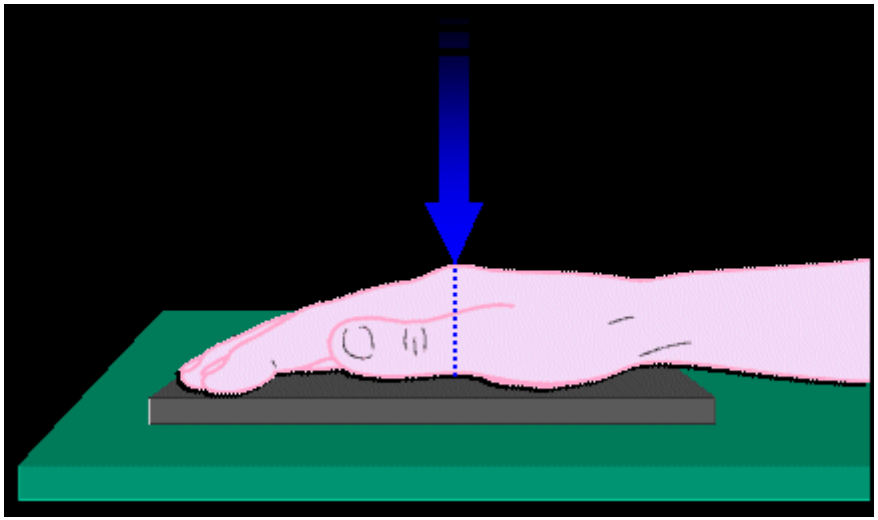

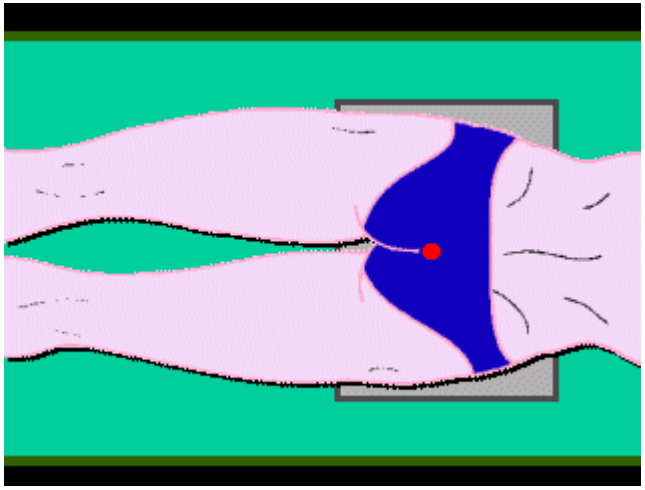

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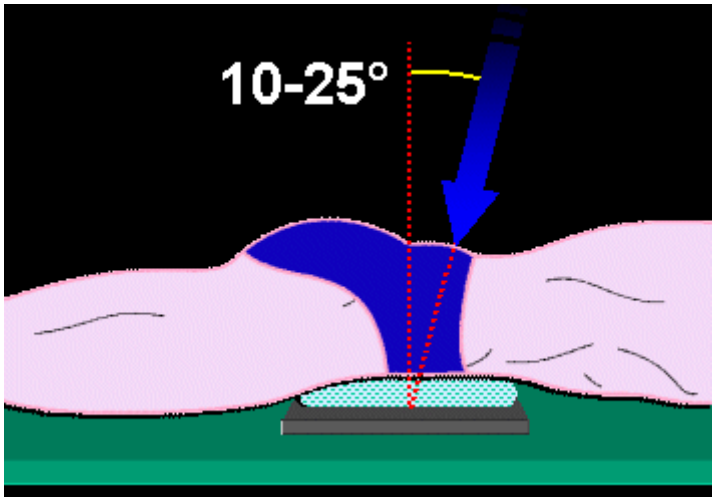
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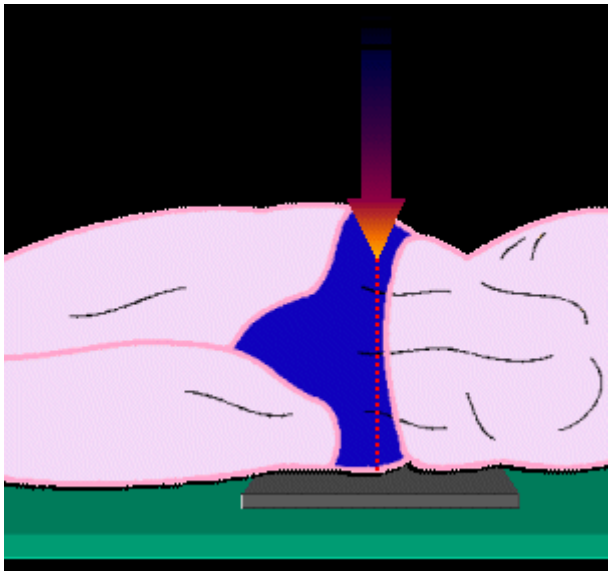

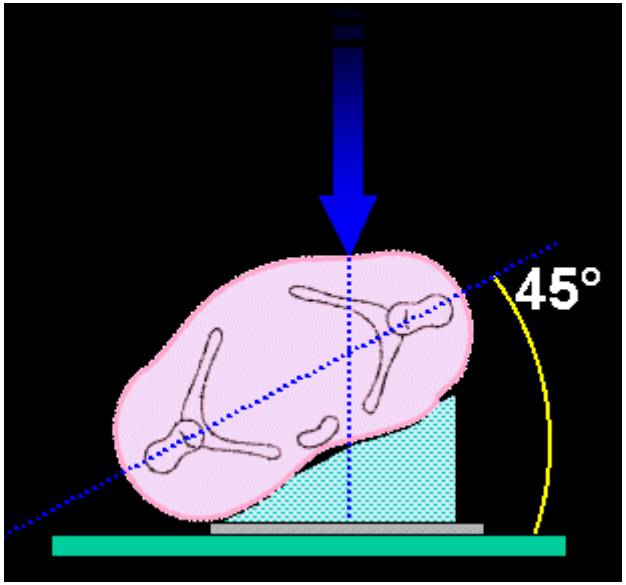
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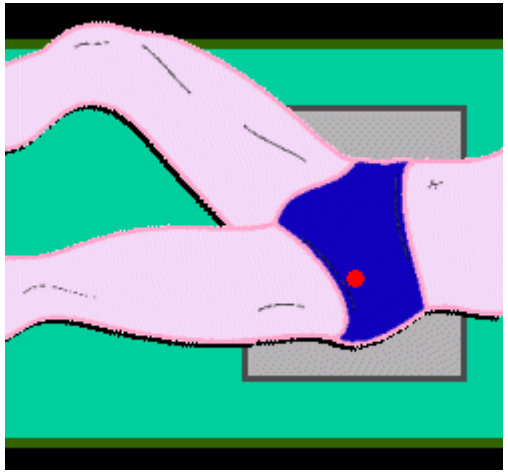

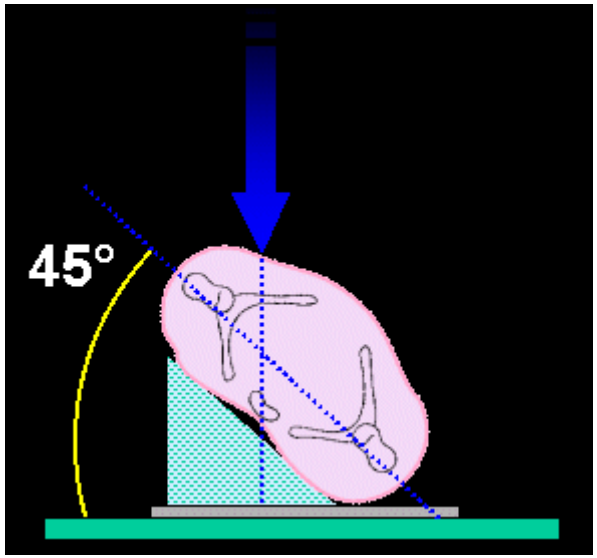
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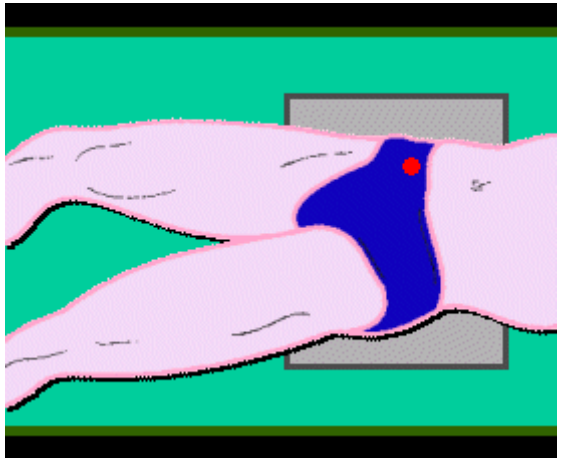

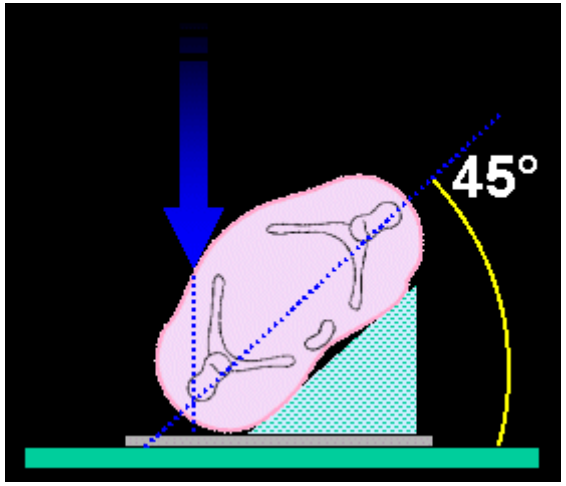
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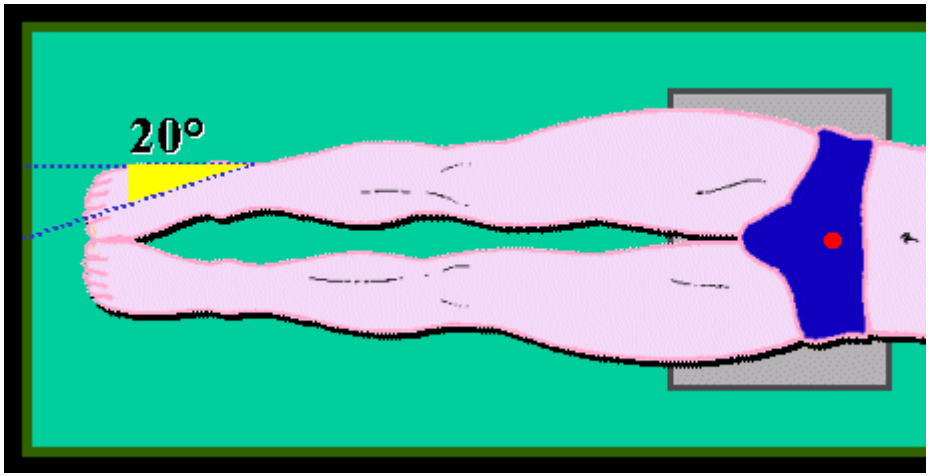
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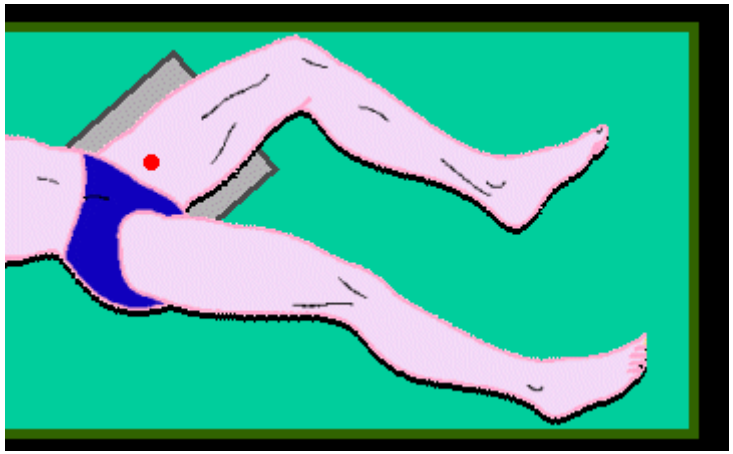

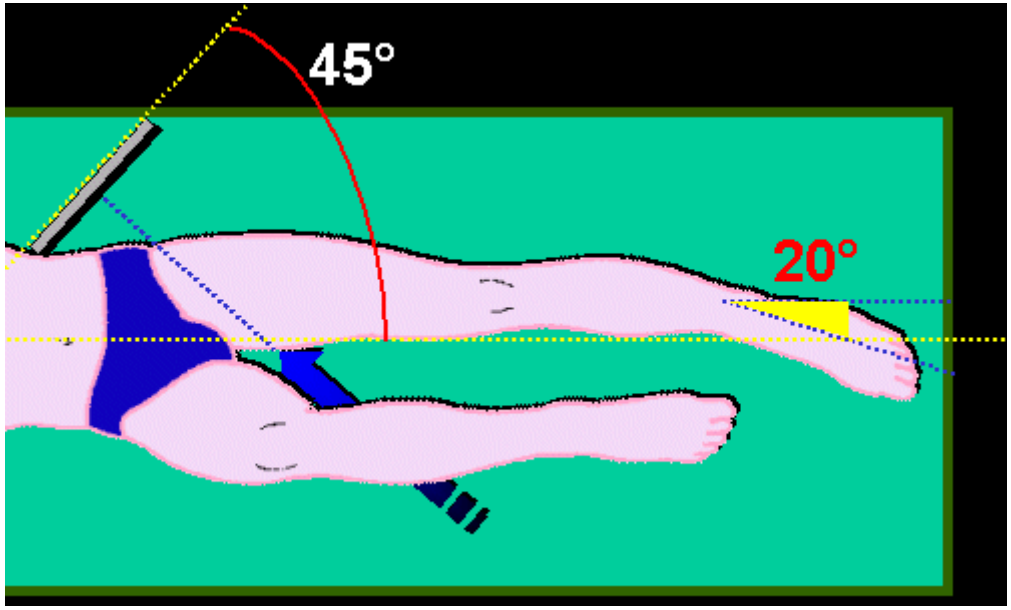
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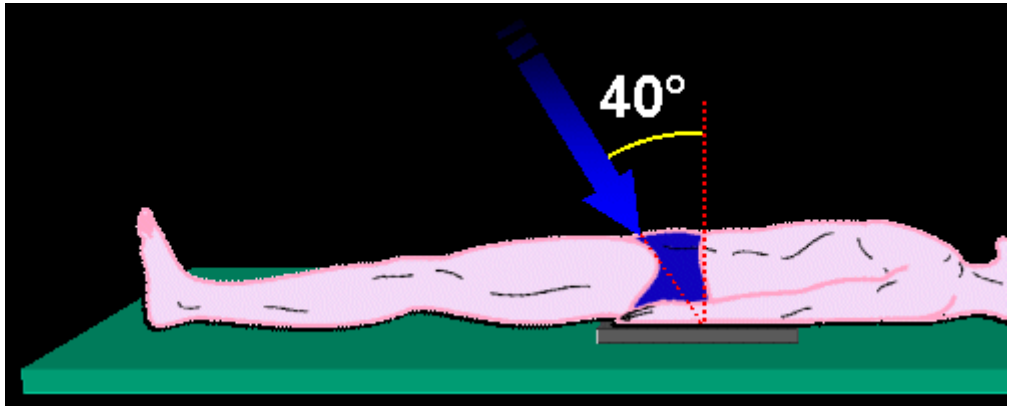
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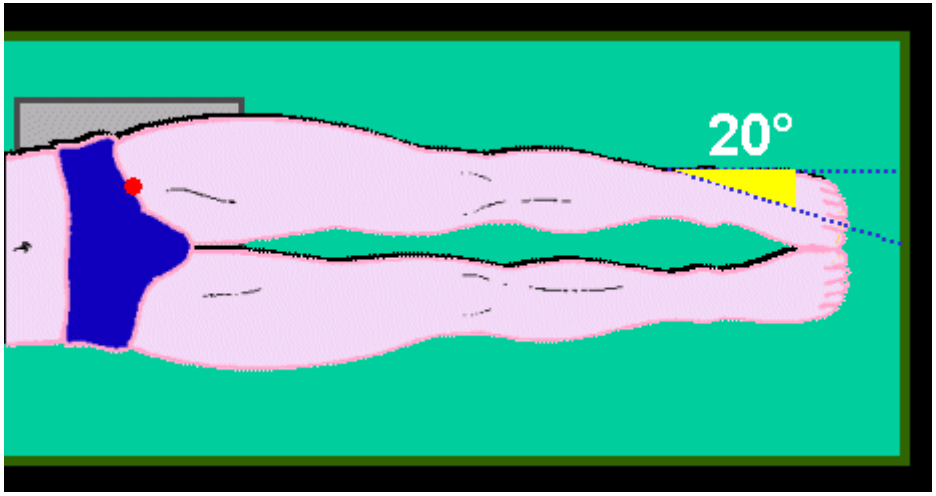
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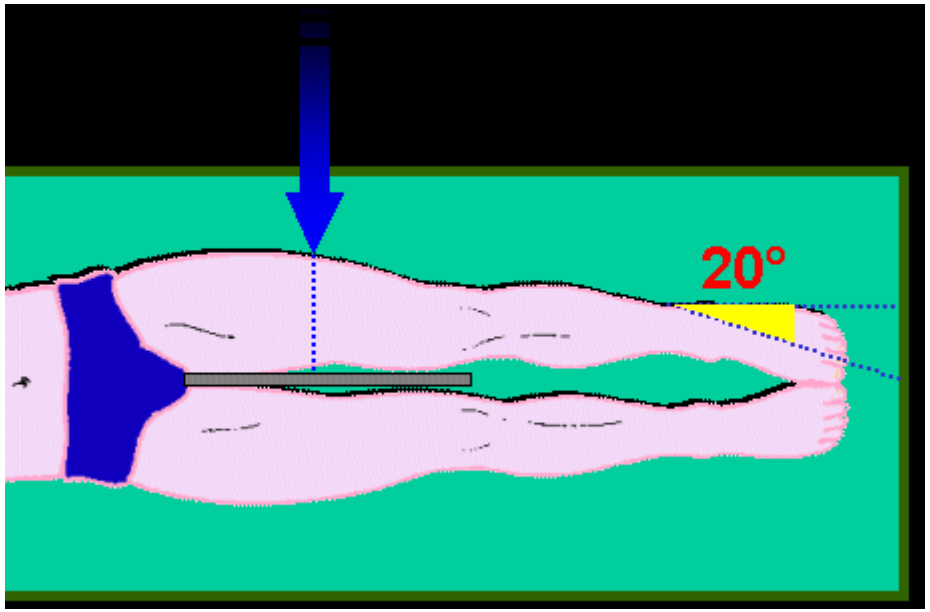
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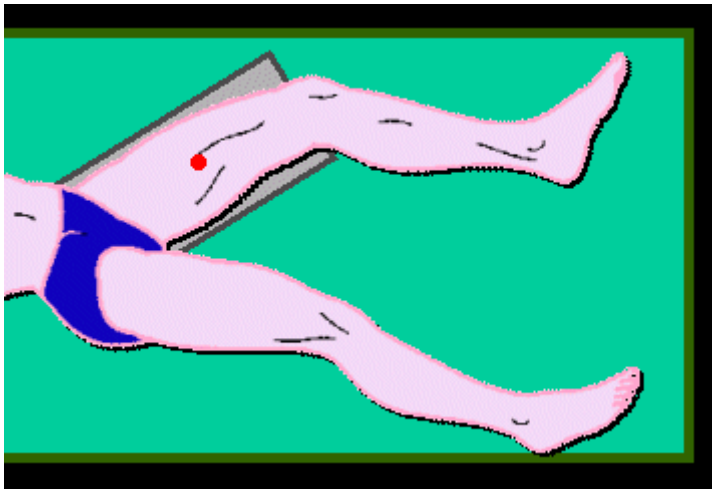

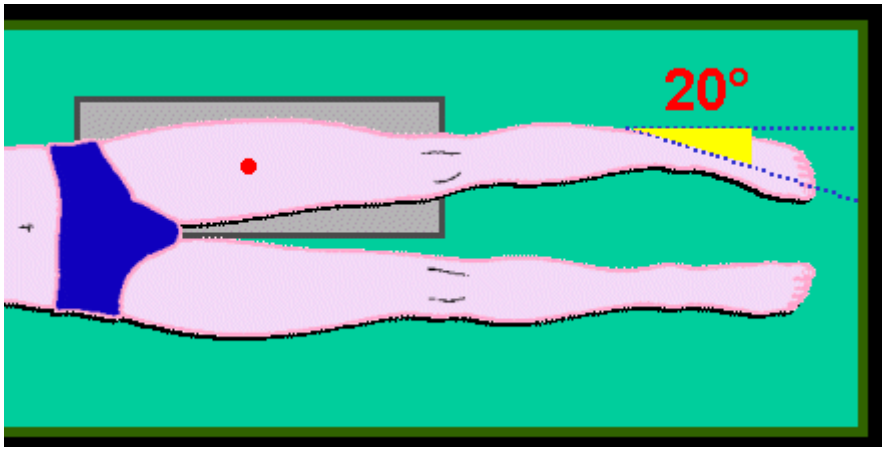
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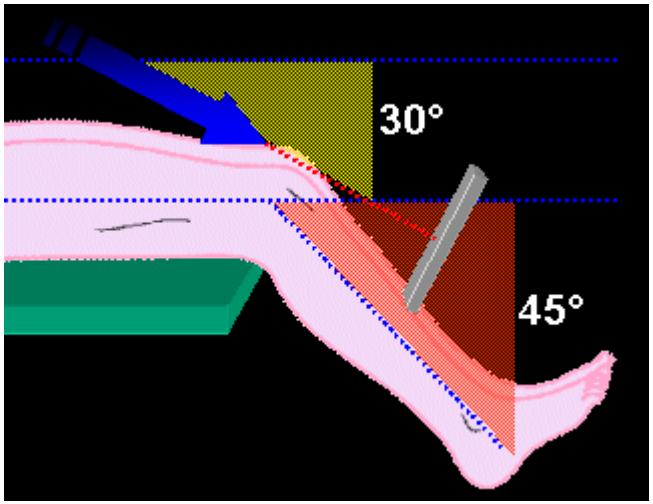
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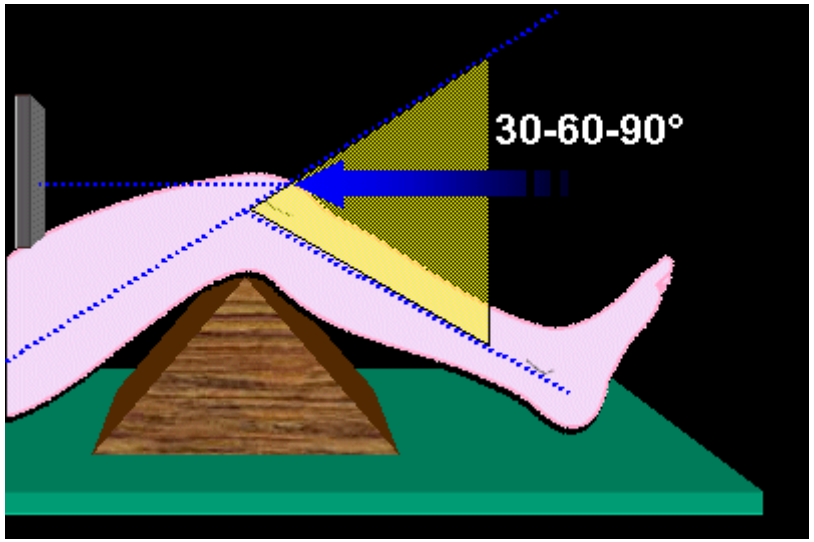

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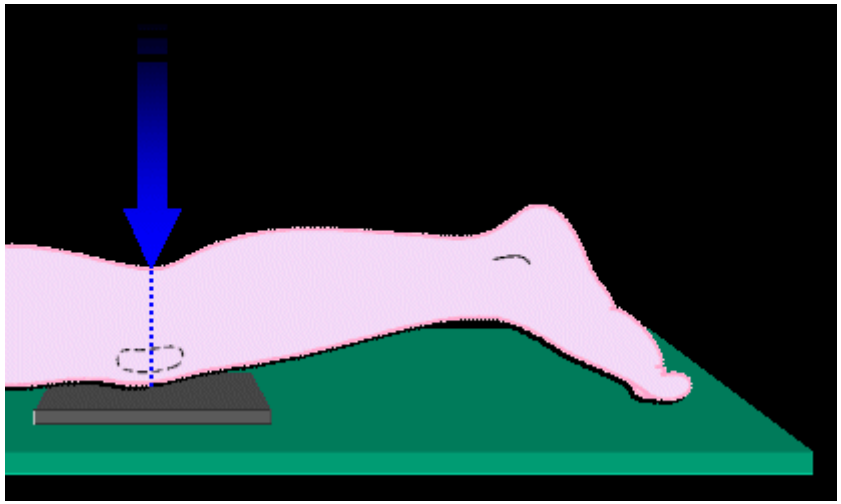

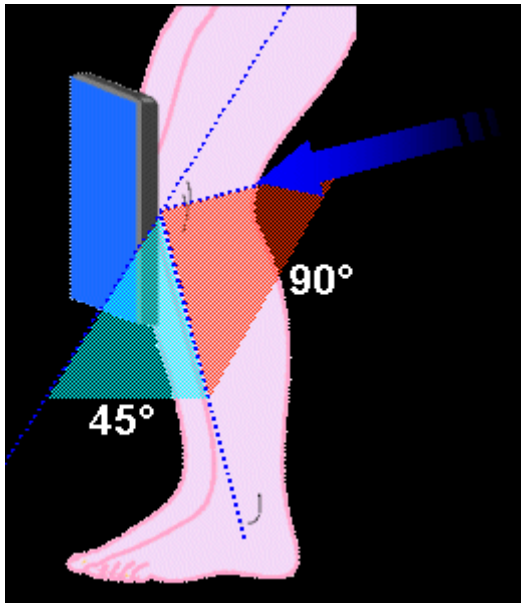
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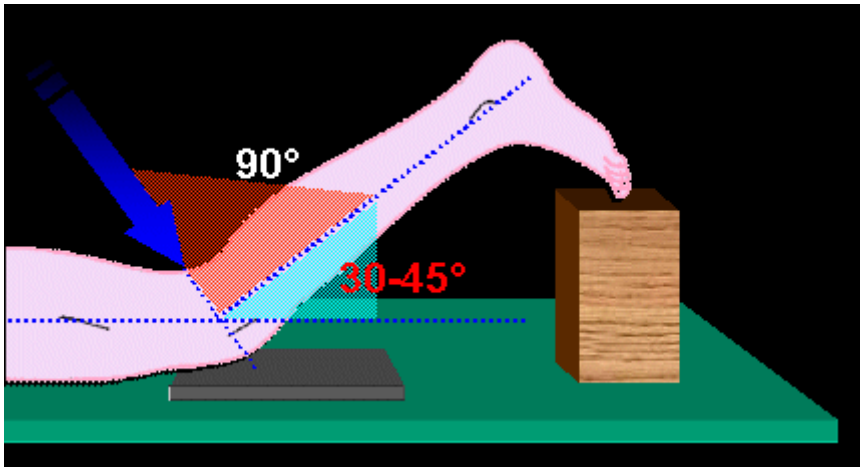
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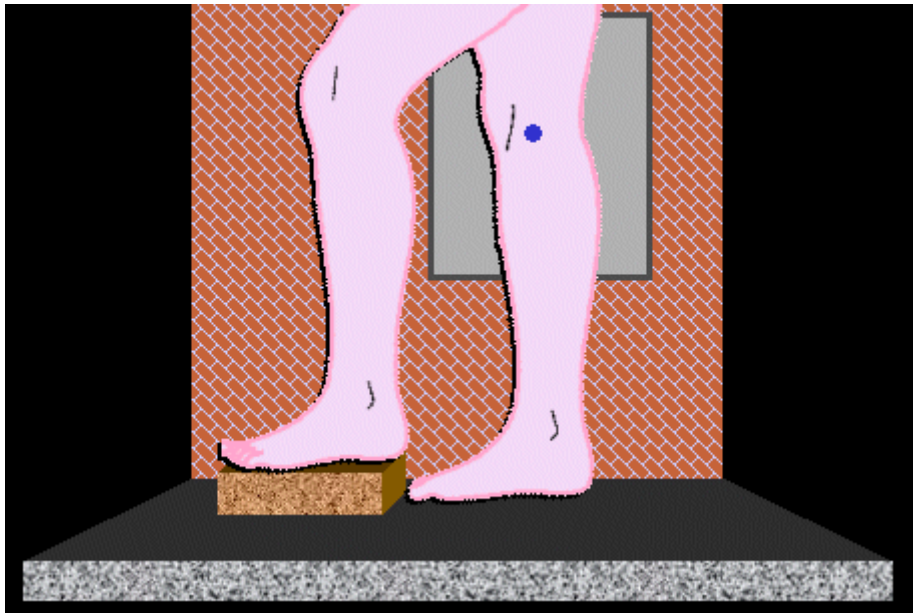

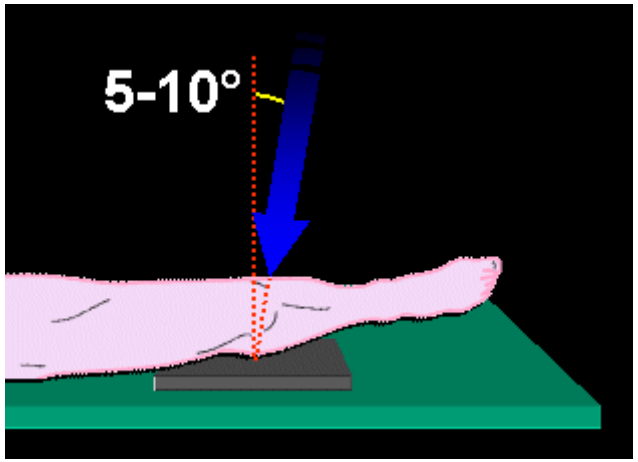
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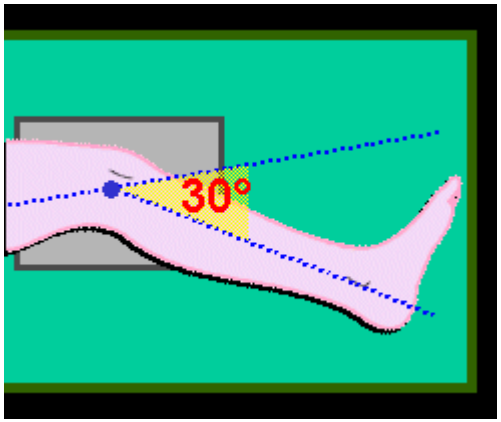
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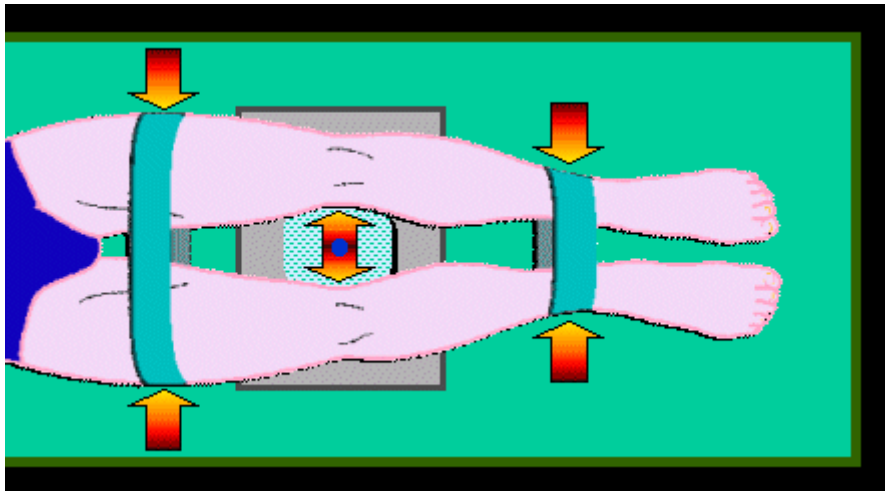

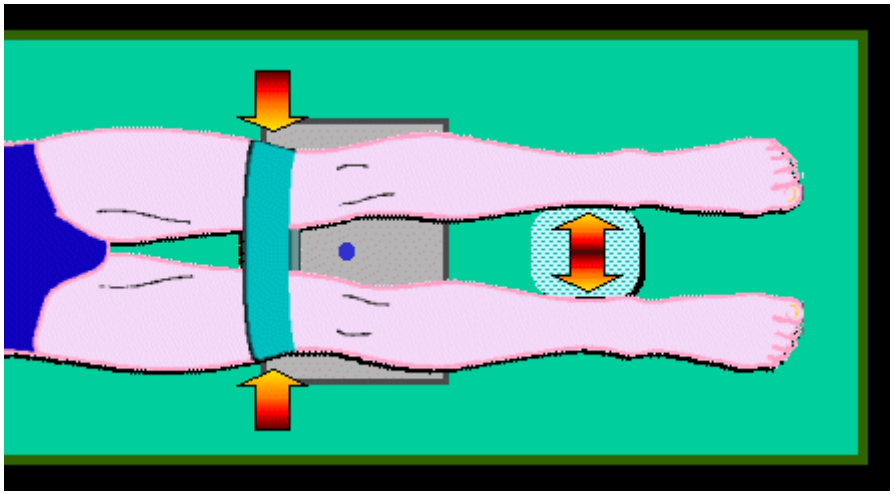

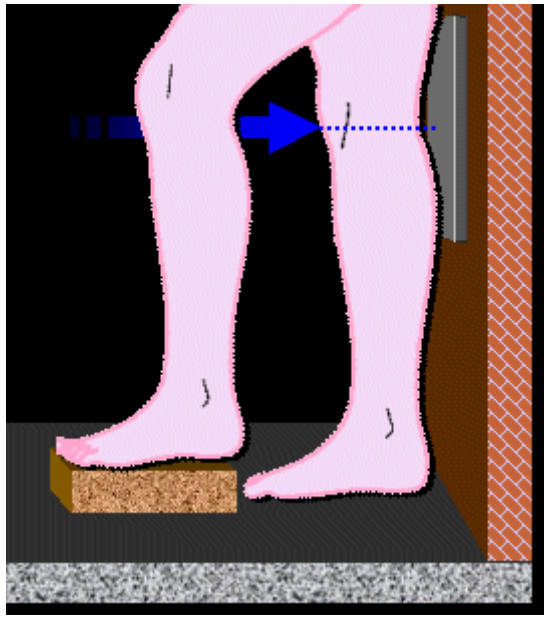

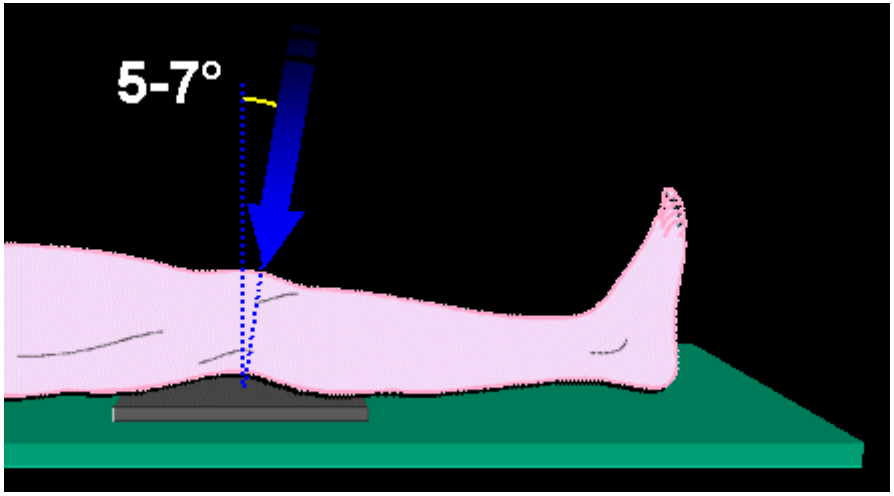
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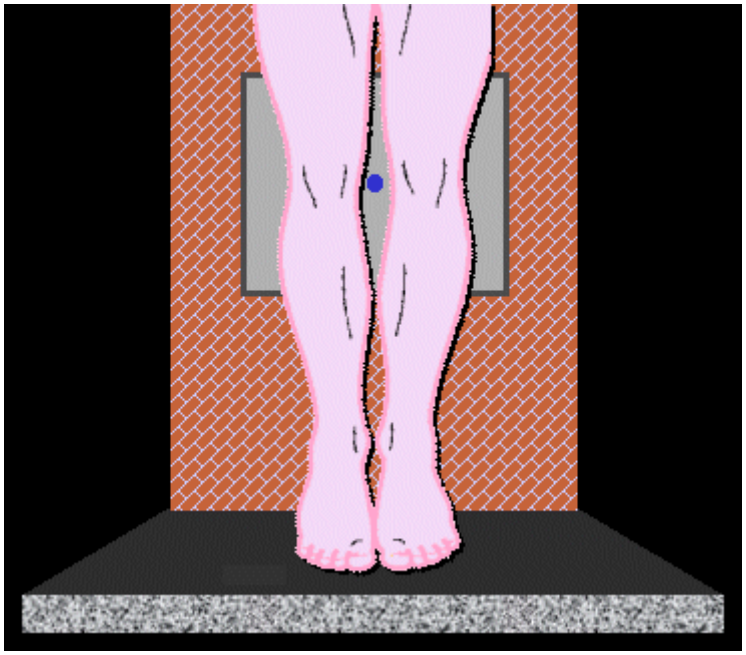

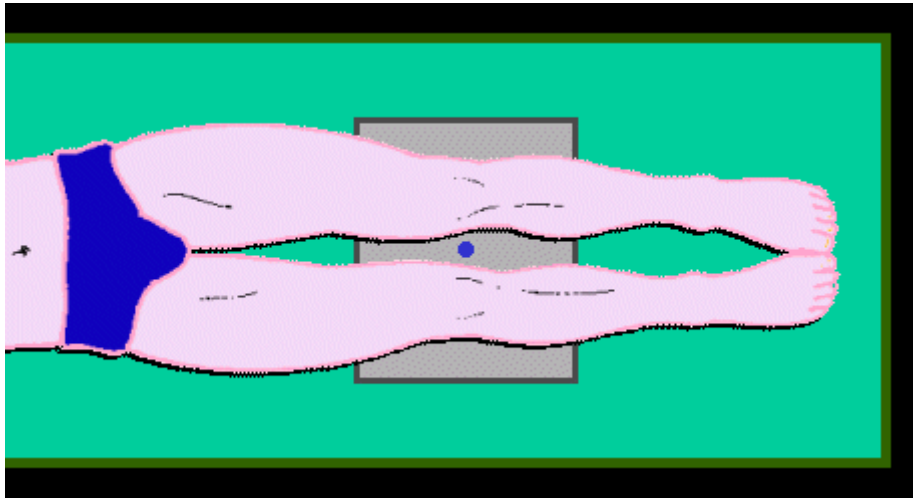

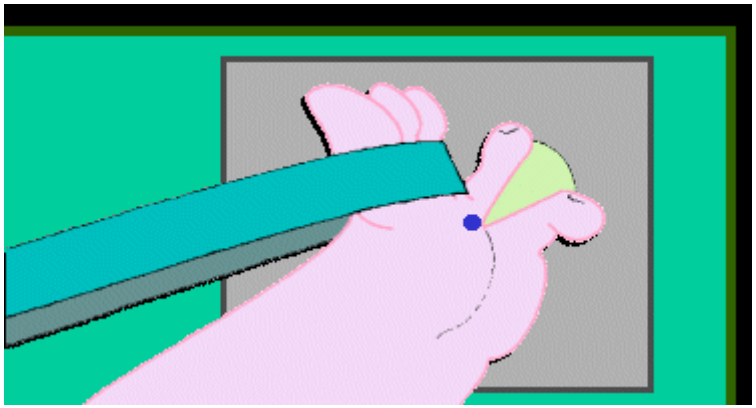

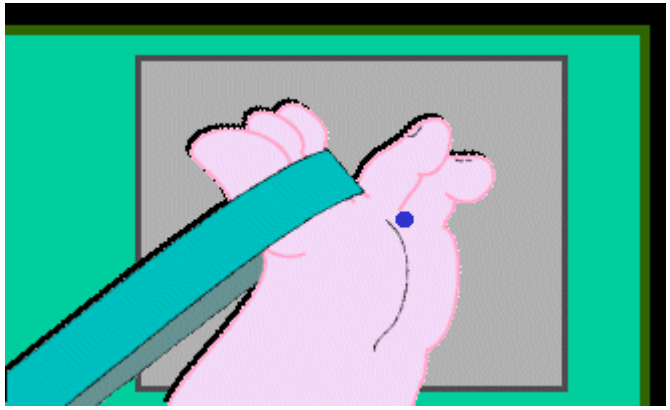

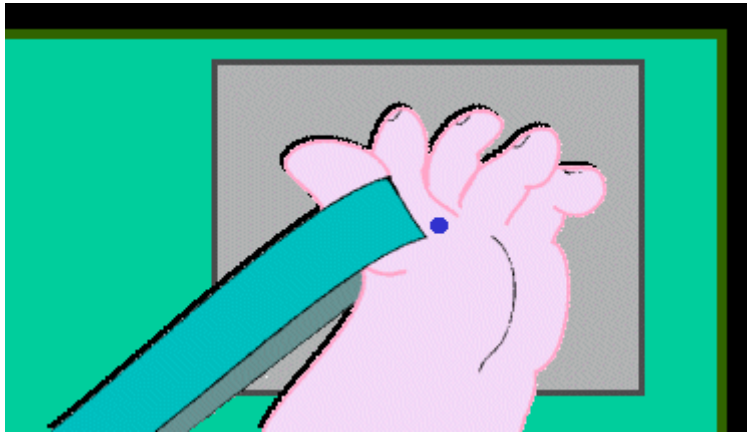

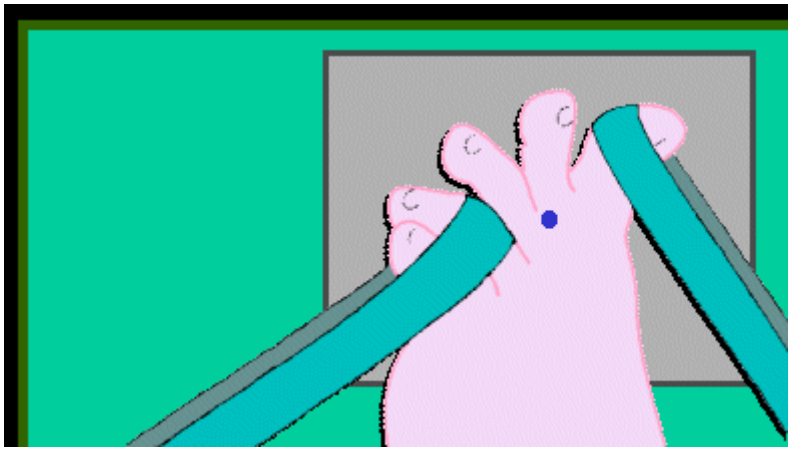

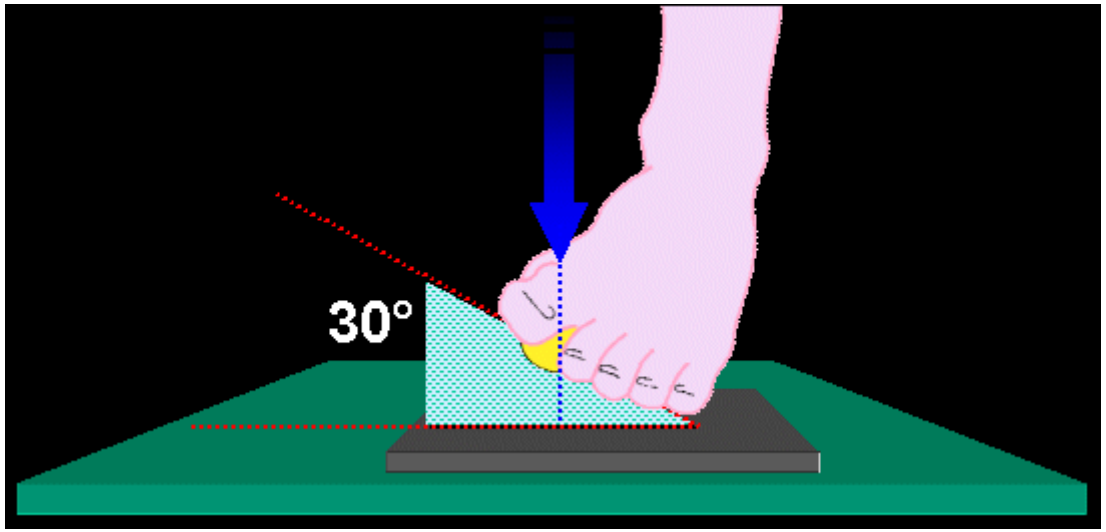
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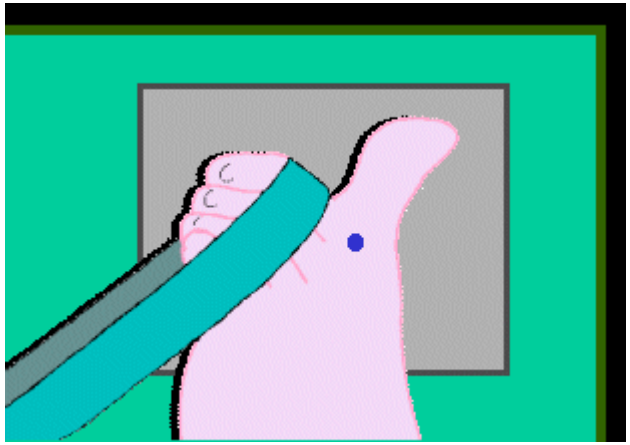

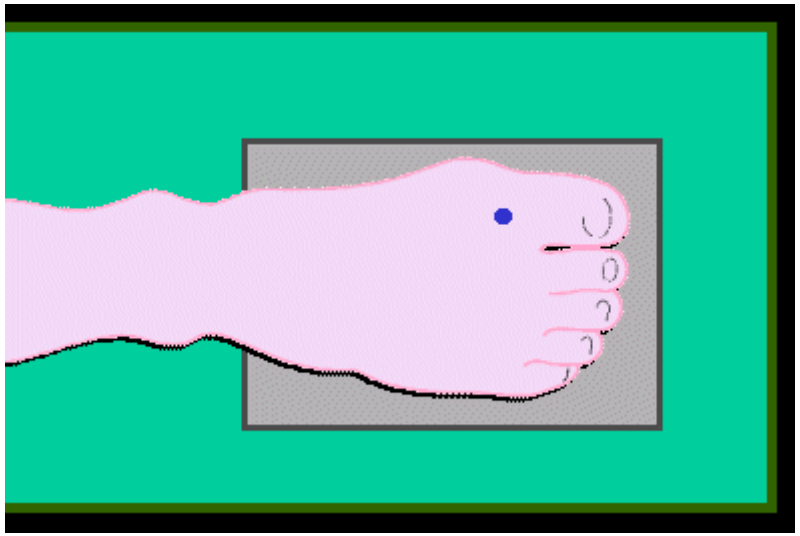

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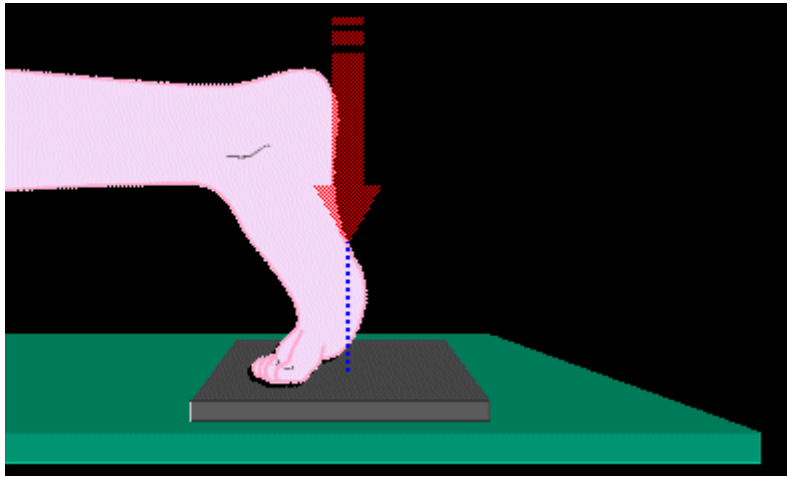

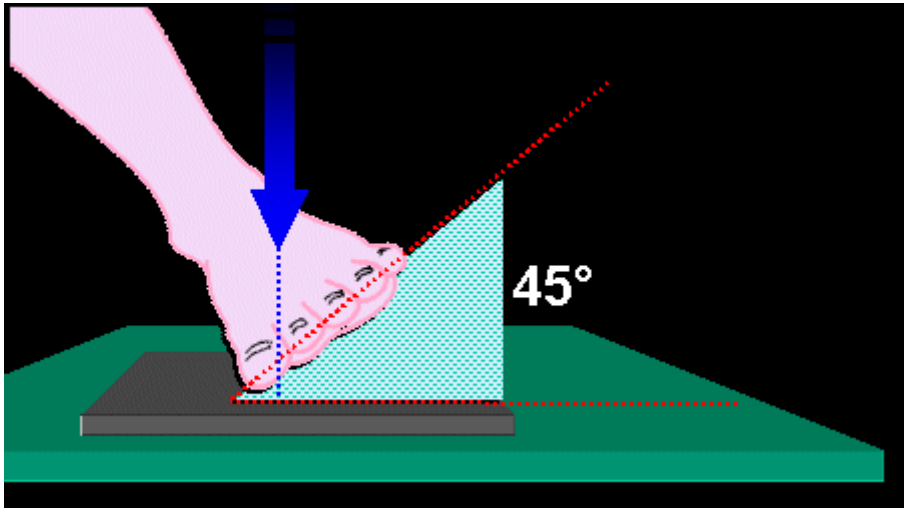
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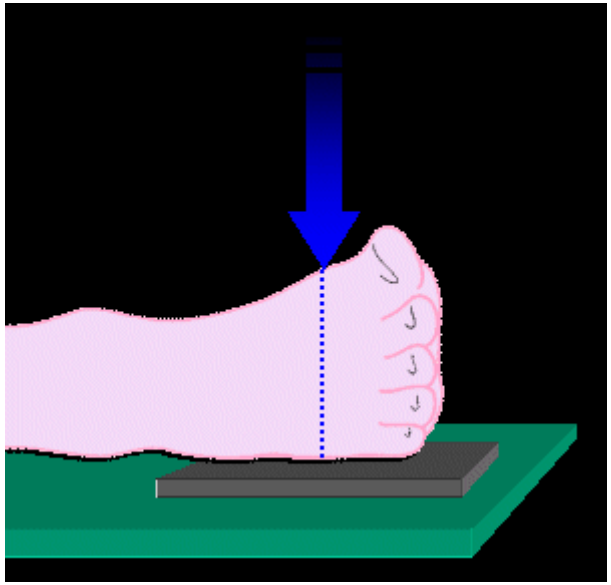

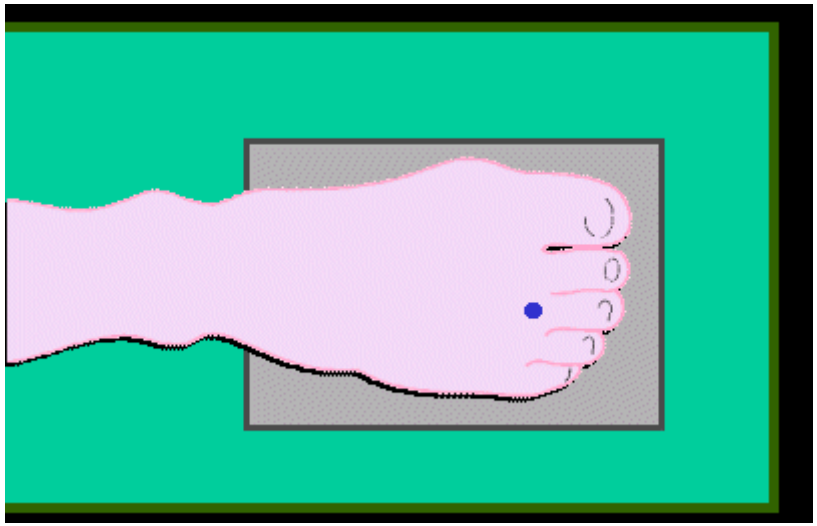

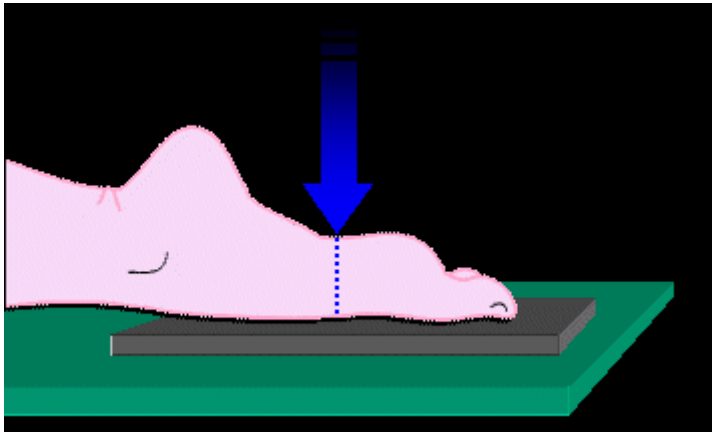

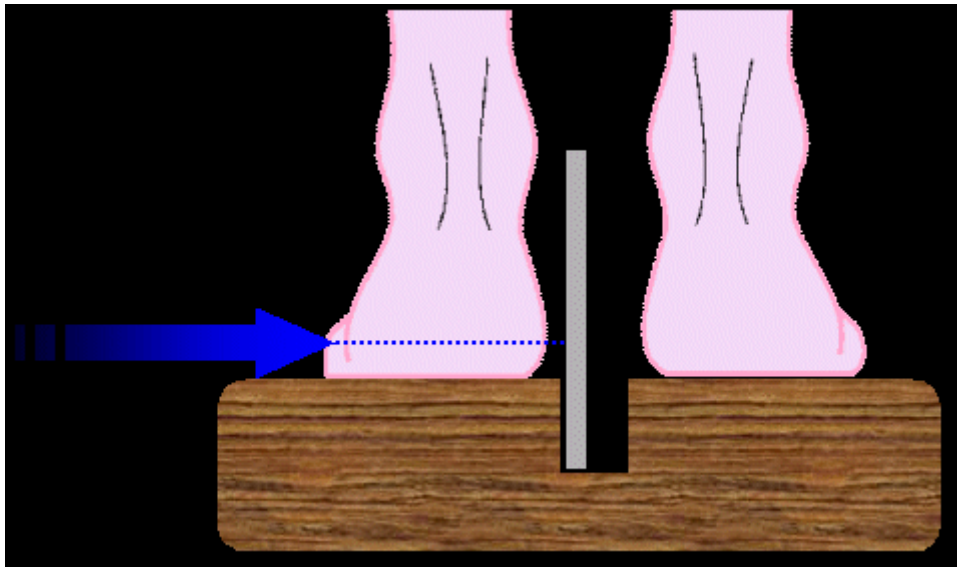

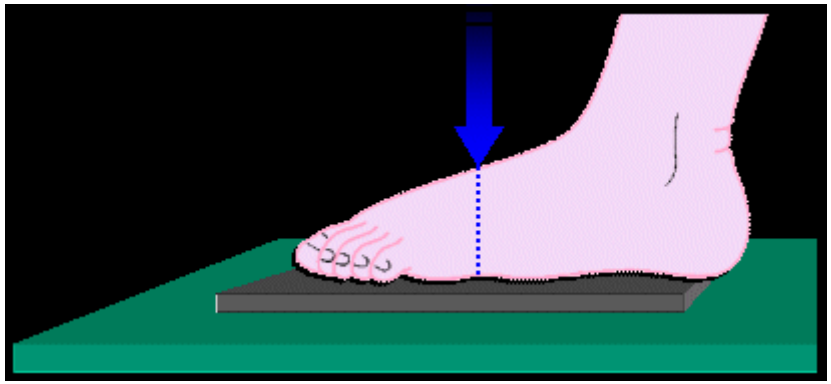

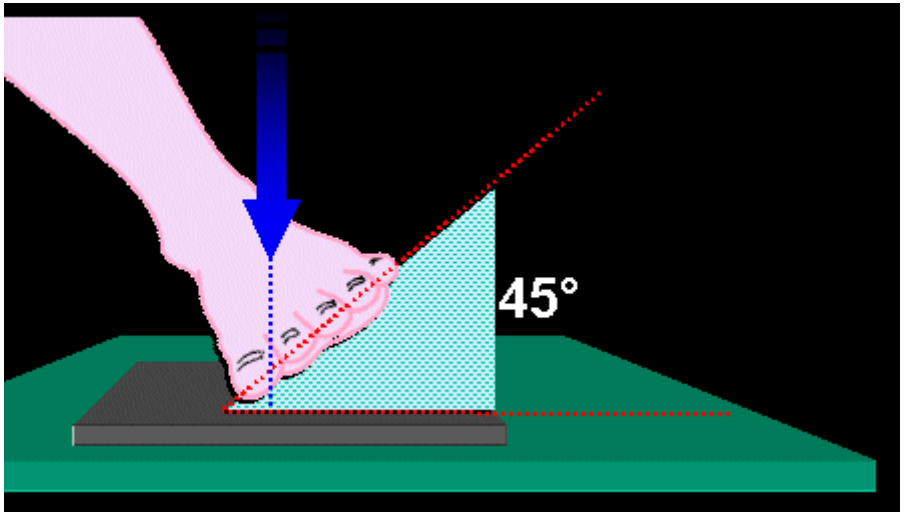
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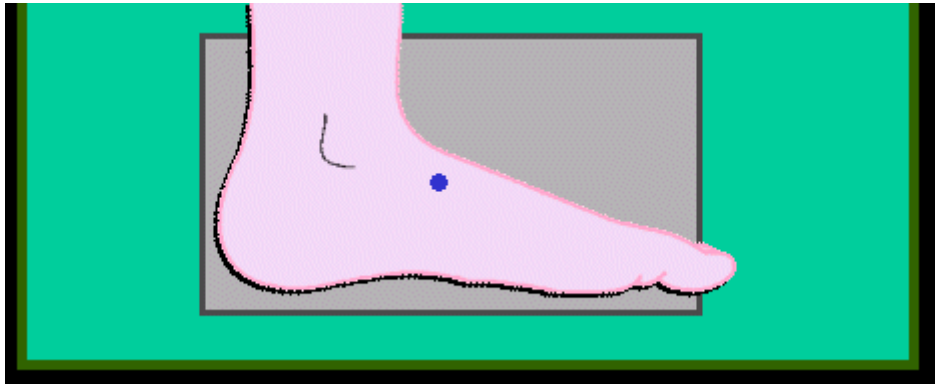

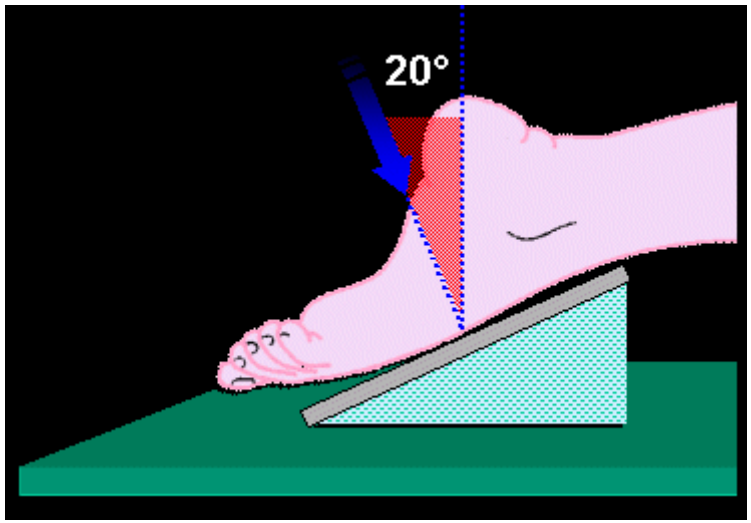
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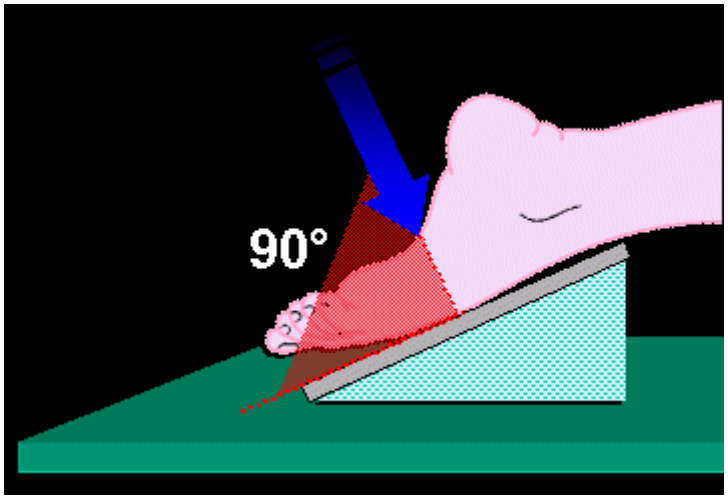
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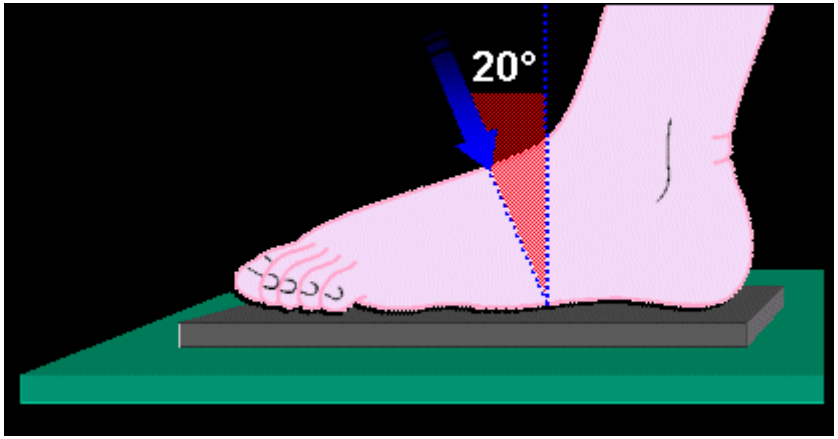
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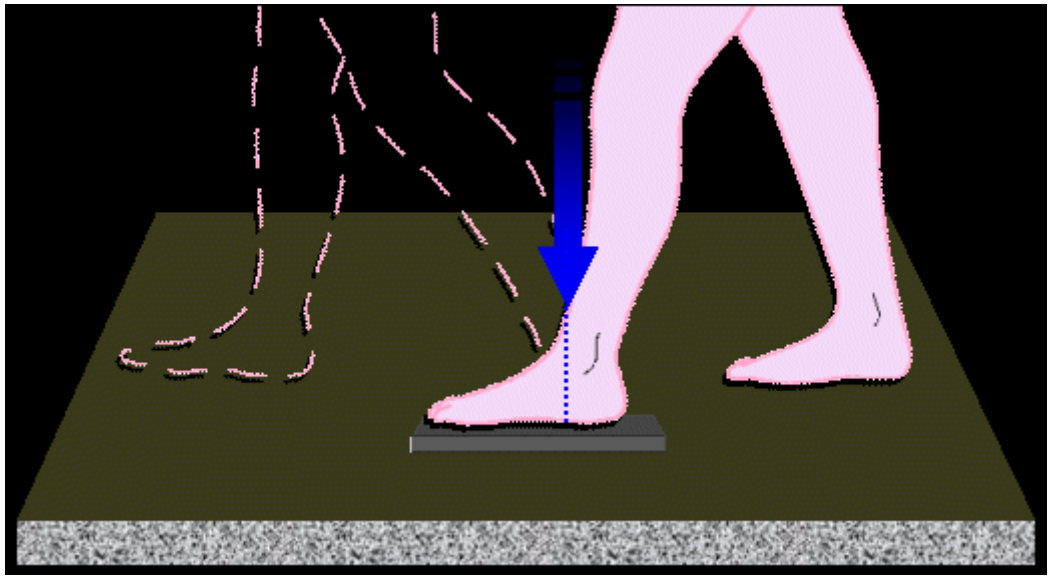

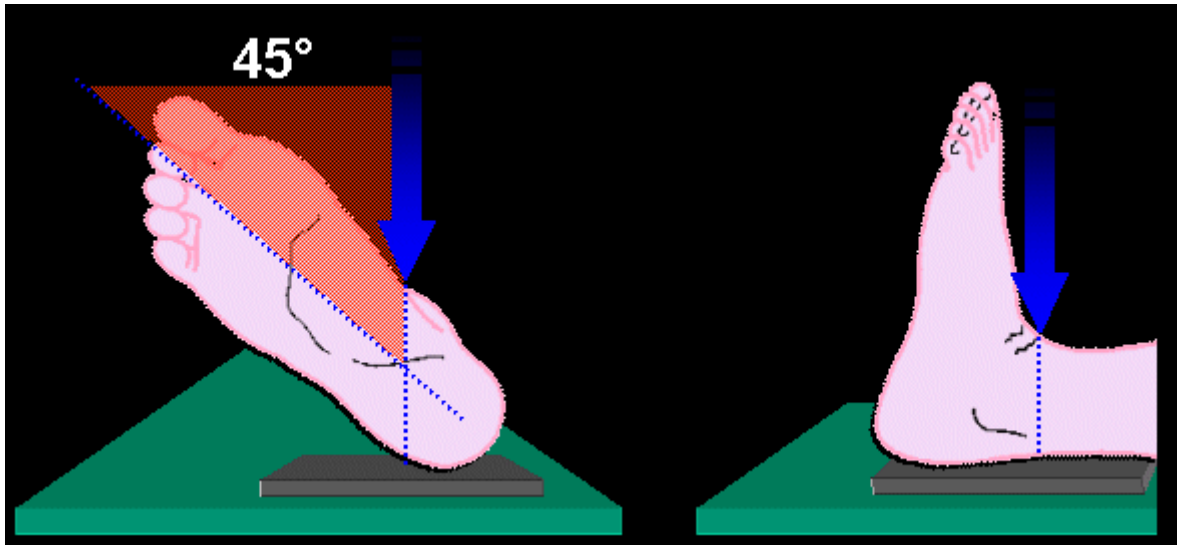
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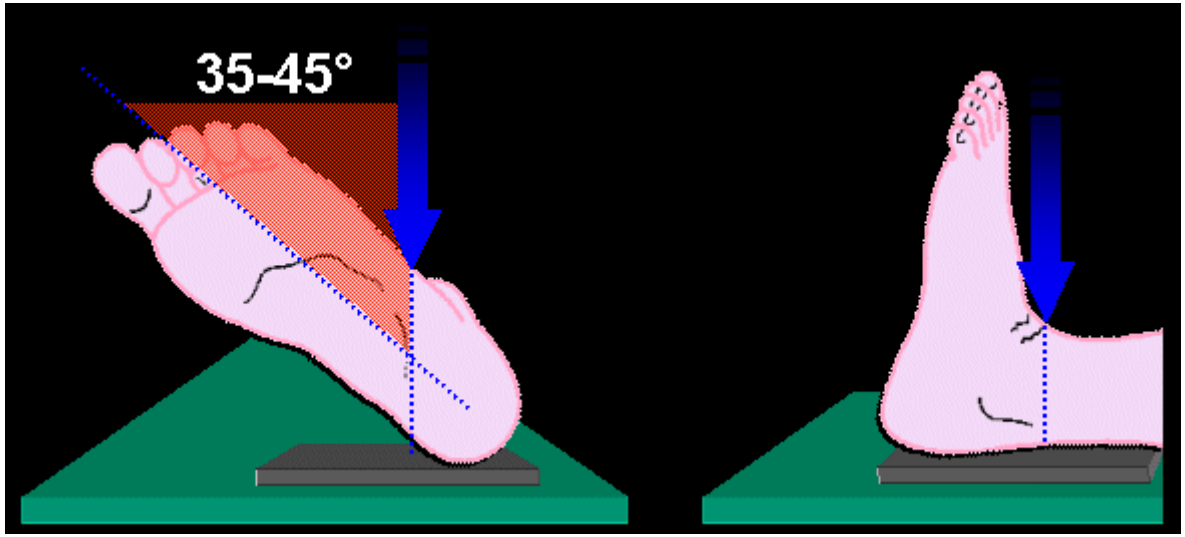
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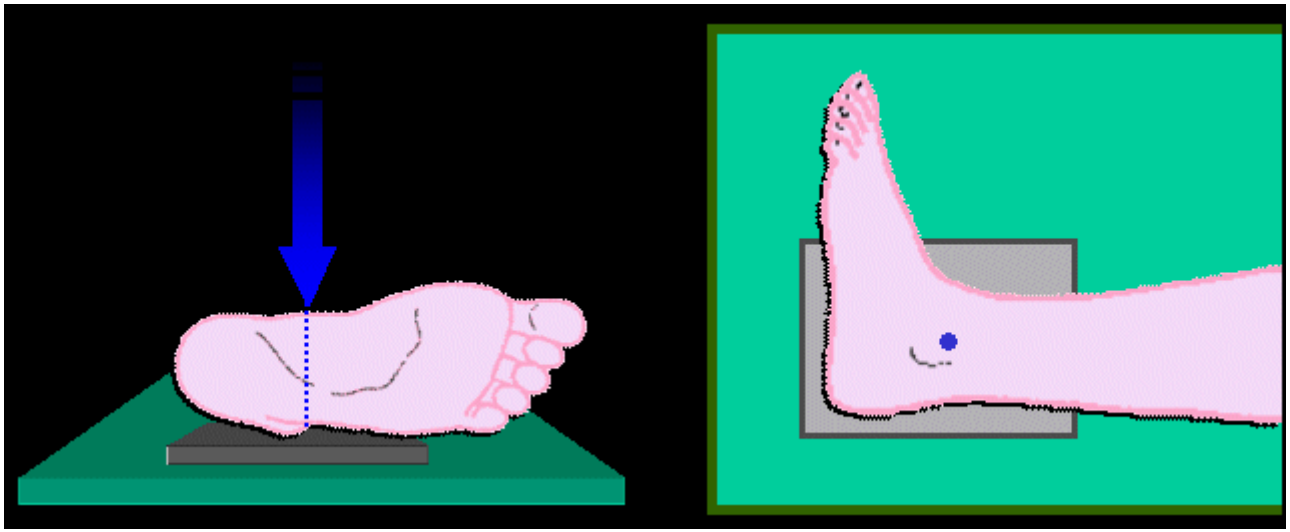

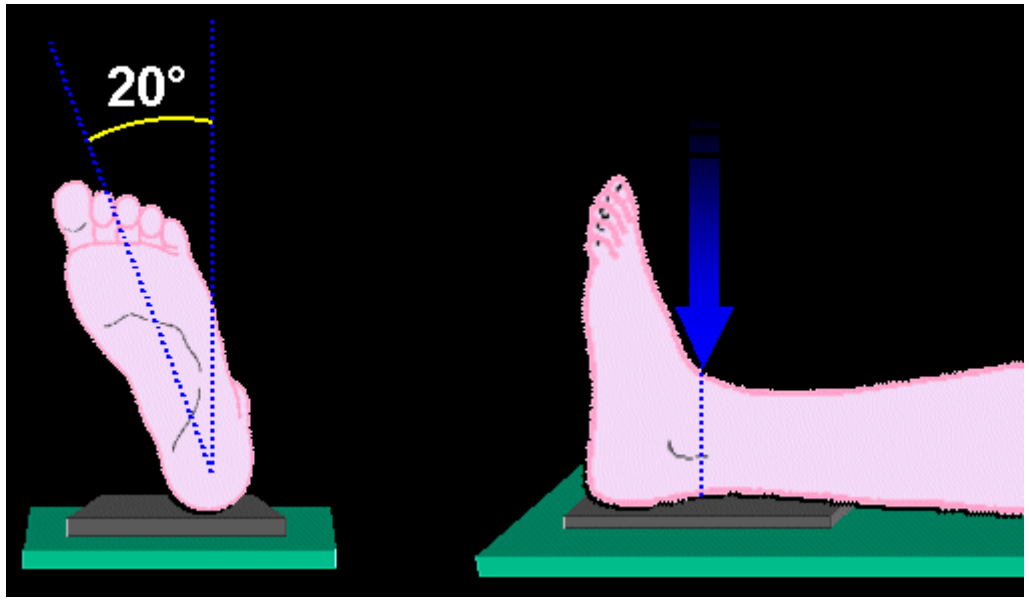
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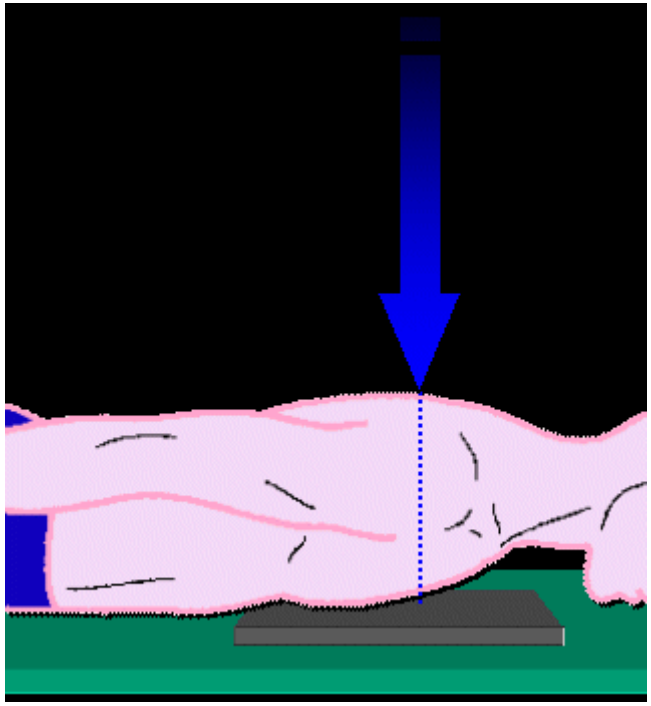

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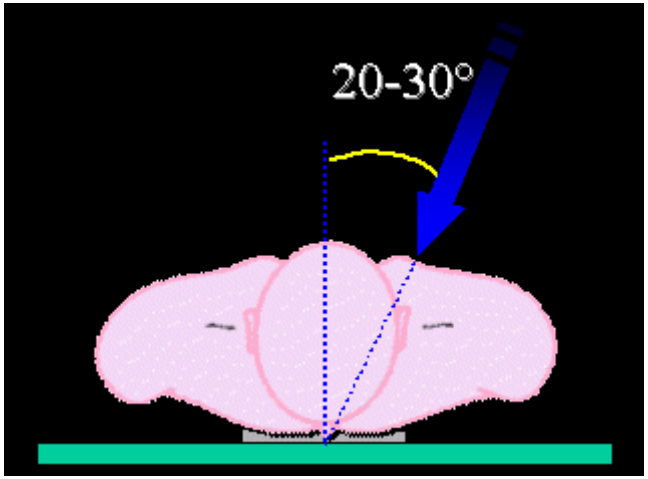
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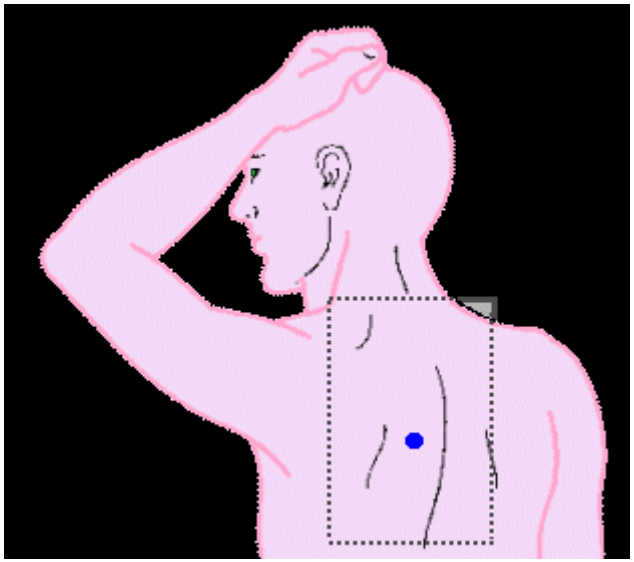

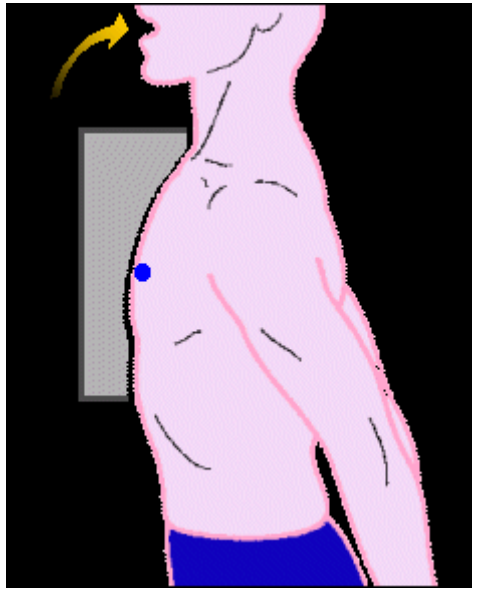

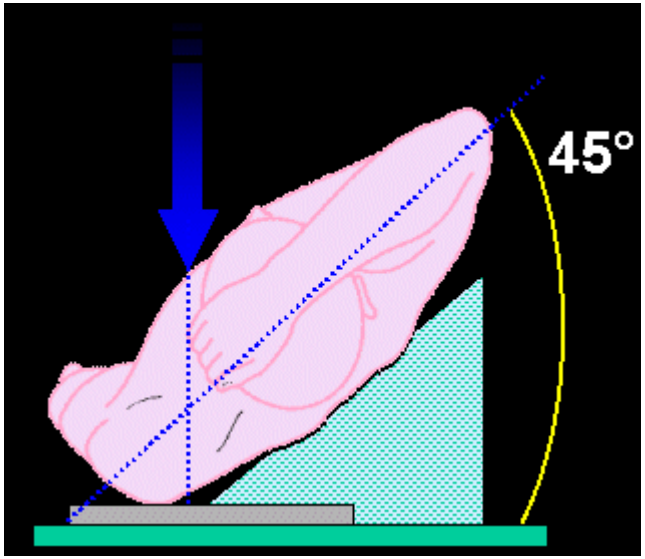
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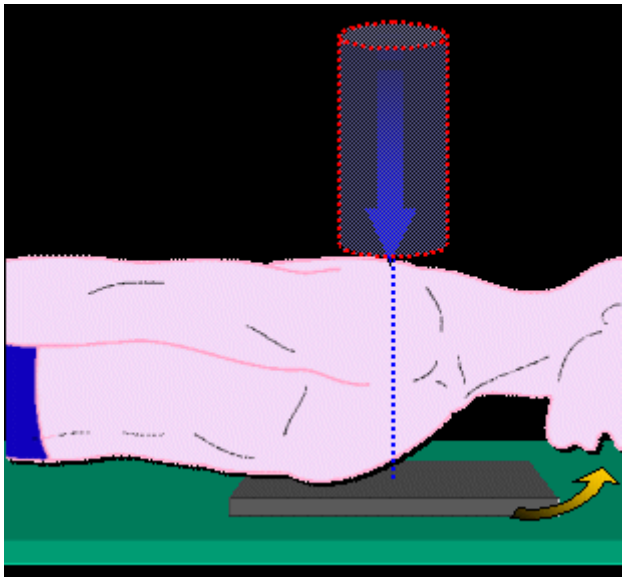

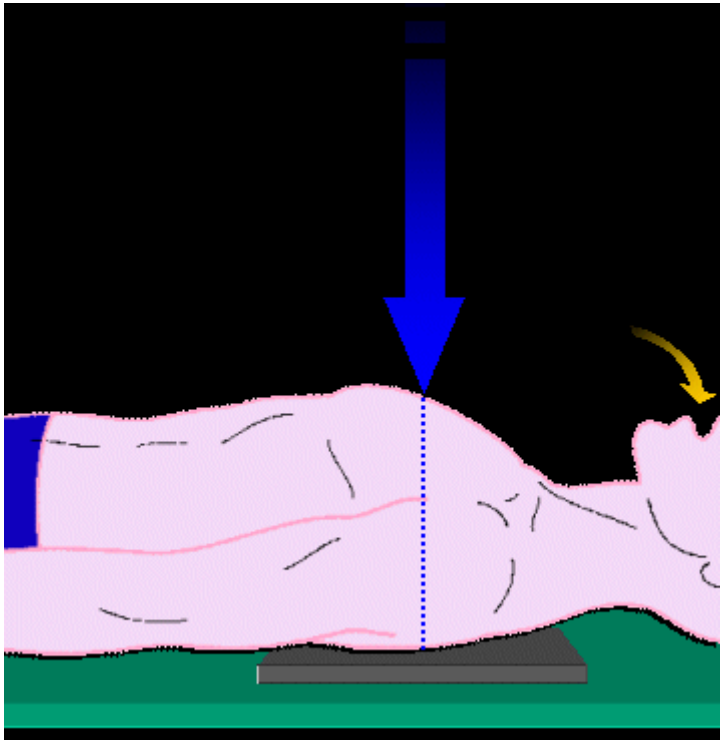

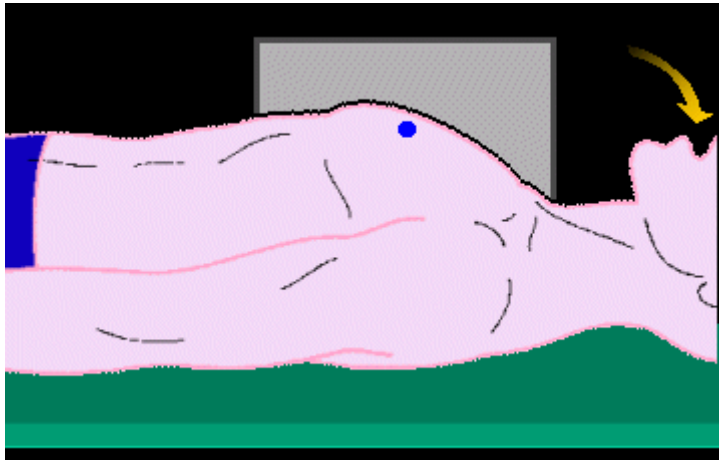

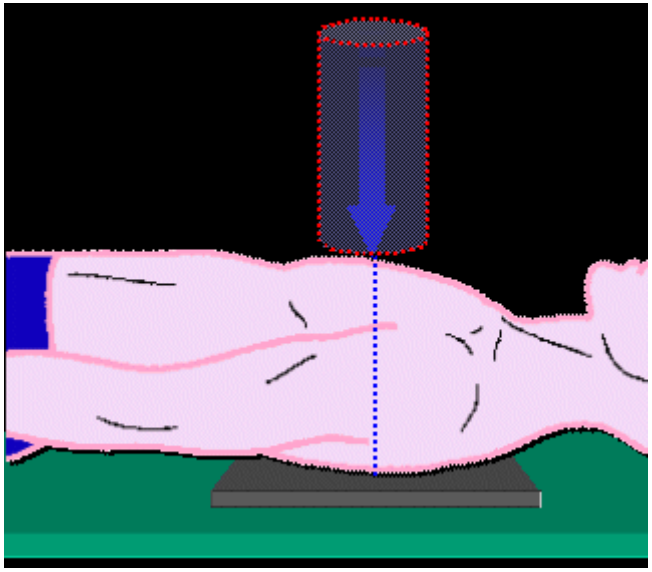

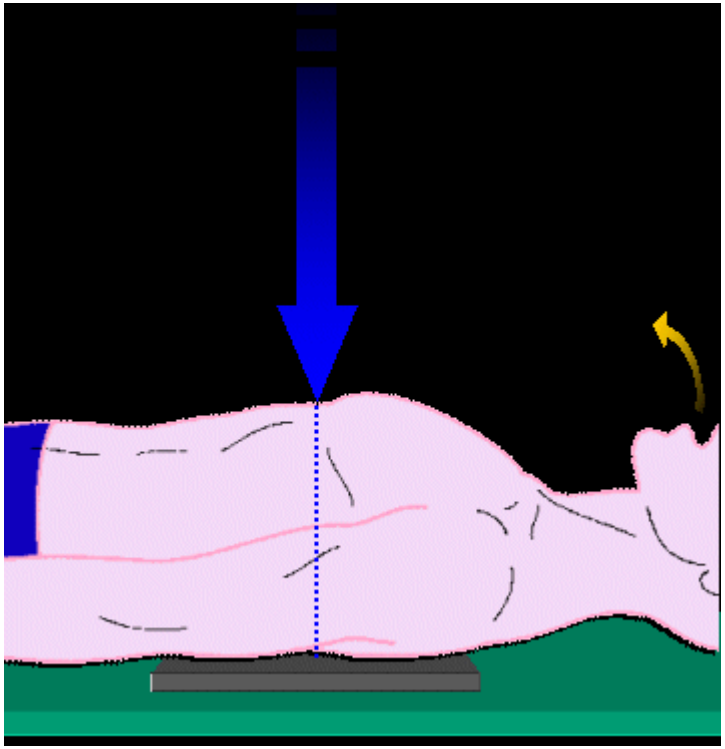

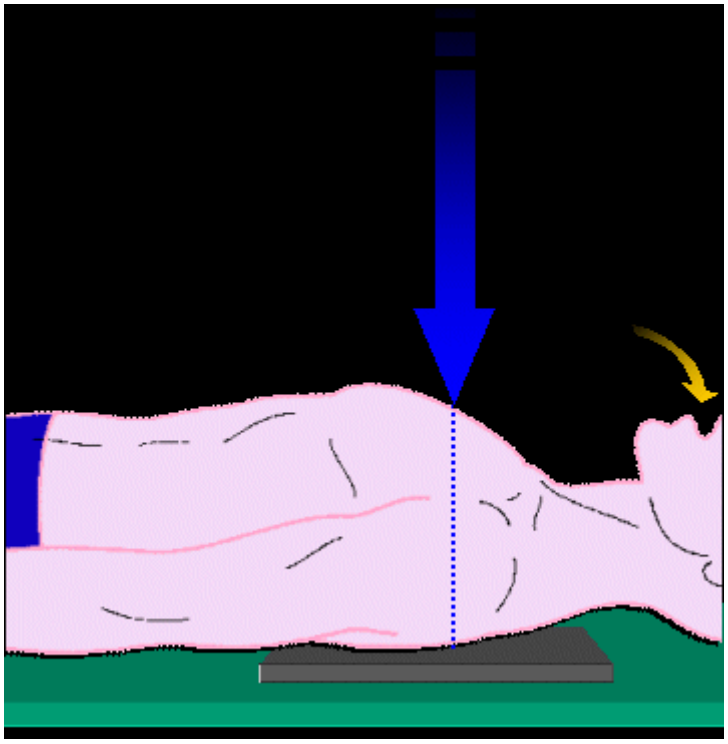

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