



The Ritter Unit Equipment



*W*ILL be found equally as practical and efficient whether the operator has an assistant or not, as ample provision has been made for an assistant to work at the left of the chair within instant reach of the various electrical instruments and other appliances, or the same can be readily reached and used by the operator without the necessity of change of position.

General Arrangement or considerations for extraction:-

1- Light (illumination) & retraction:-

Dentist or oral surgeon work in a limited accessible area (oral cavity) , then he is going to do his work (extraction site) in a relatively inaccessible area , in addition to that the shadow of the hand & the instrument he use , so good illumination of the operative field and retraction are very important & necessary to perform your work efficiently & safely. Also good illumination is important during clinical examination of teeth **to avoid overlooking** of any area in the mouth by reflecting light on the dental mirror especially the upper posterior area .e.g **large interproximal carious** lesions, discharging **sinus**.





2- Position of the patient: (Fig-1).

Correct position of the patient is very important to avoid any occupational postural problems. The patient is seated comfort in the dental chair with head rest adjusted *back* to fit the nape of the neck & support of the head. The chair is adjusted in such a way that the head, neck, trunk are in one line to reduce any strain caused by stretching it backward or pushing it forward.

In upper teeth (maxillary):

The back rest inclined 15- 30 degrees from the vertical line.

The angle between the back rest of the dental chair and the floor is about 120 degrees.

The occlusal plane of the upper teeth is about 45-60 degrees with the horizontal plane by tipping the head rest backward.

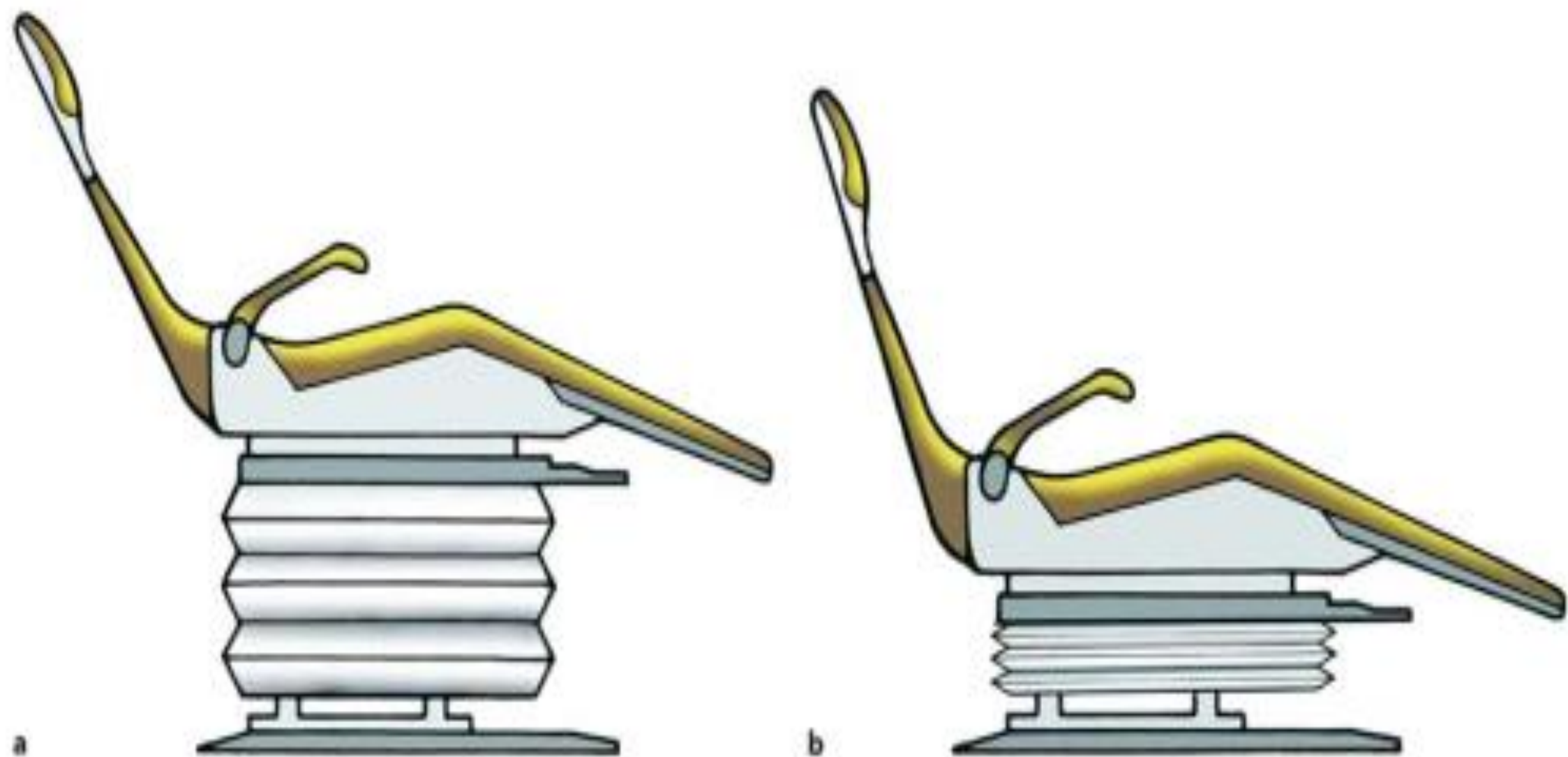


Fig. 5.1 a,b. Position of dental chair during extraction. **a** Maxilla: angle between dental chair and the horizontal (floor) is 120° . **b** Mandible: angle between dental chair and the horizontal (floor) is 110°

In lower teeth (mandible):-

back rest inclined about $(5-²⁰~~10~~)$ degrees

Angle between dental chair and floor (110) degrees.

The head rest should be adjusted so that when the patient opens his mouth the occlusal plane going to be parallel to the floor.

In general the angulation of the chair should be adjusted in a way so that the operative field when the patient open his mouth going to be in the most visible and accessible position.

3- Position of the operator: (Fig-1).

When extracting any tooth in the oral cavity except the right mandibular molars , premolars, canines (MPC) , the operator stand on the right-hand side of the patient , in other words in front of the patient . For removal of right mandibular cheek teeth MPC the operator stand behind the patient & sometime the operator stand on the operating box in order to achieve the optimal working position.



FIG- 1- notice the operator position and chair height in relation to upper and lower teeth.

Correct positioning of the operator is very important to operator:-

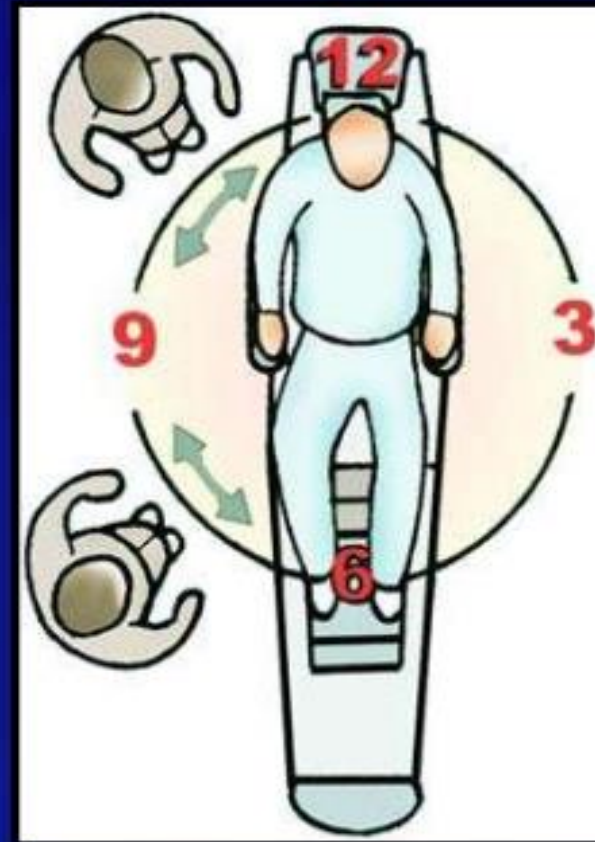
1- To have good visibility.

2- Accessibility to oral cavity.

3-to apply the force necessary for extraction without any stress on his own back or shoulders, and with equal distribution of his weight on each foot.

Cont ...

- For all maxillary teeth and anterior mandibular teeth, the dentist is to the **front and right** (and to the left, for left-handed dentists) of the patient.
- For the posterior mandibular teeth the dentist is positioned **in front of or behind and to the right** (or to the left, for left-handed dentists) of the patient









4- Height of the dental chair:

This is very important. If the site of the operation is either too high or too low in relation to the operator, he works at a mechanical disadvantage and in a tiring and uncomfortable position. And to avoid occupational postural problems in the future.

When maxillary teeth are being extracted, the chair should adjust so that the site of the operation is about 8 cm (3 inches) below the shoulder level of the operator. During the extraction of a mandibular tooth the chair height should be adjusted so that the tooth to be extracted about 16 cm (6 inches) below the level of the operator's elbow .

When the operator is standing behind the patient the chair should be lowered sufficiently to enable him to have a clear view of the field of the operation so that the operator need to use the operating box to achieve such position especially with tall patients.

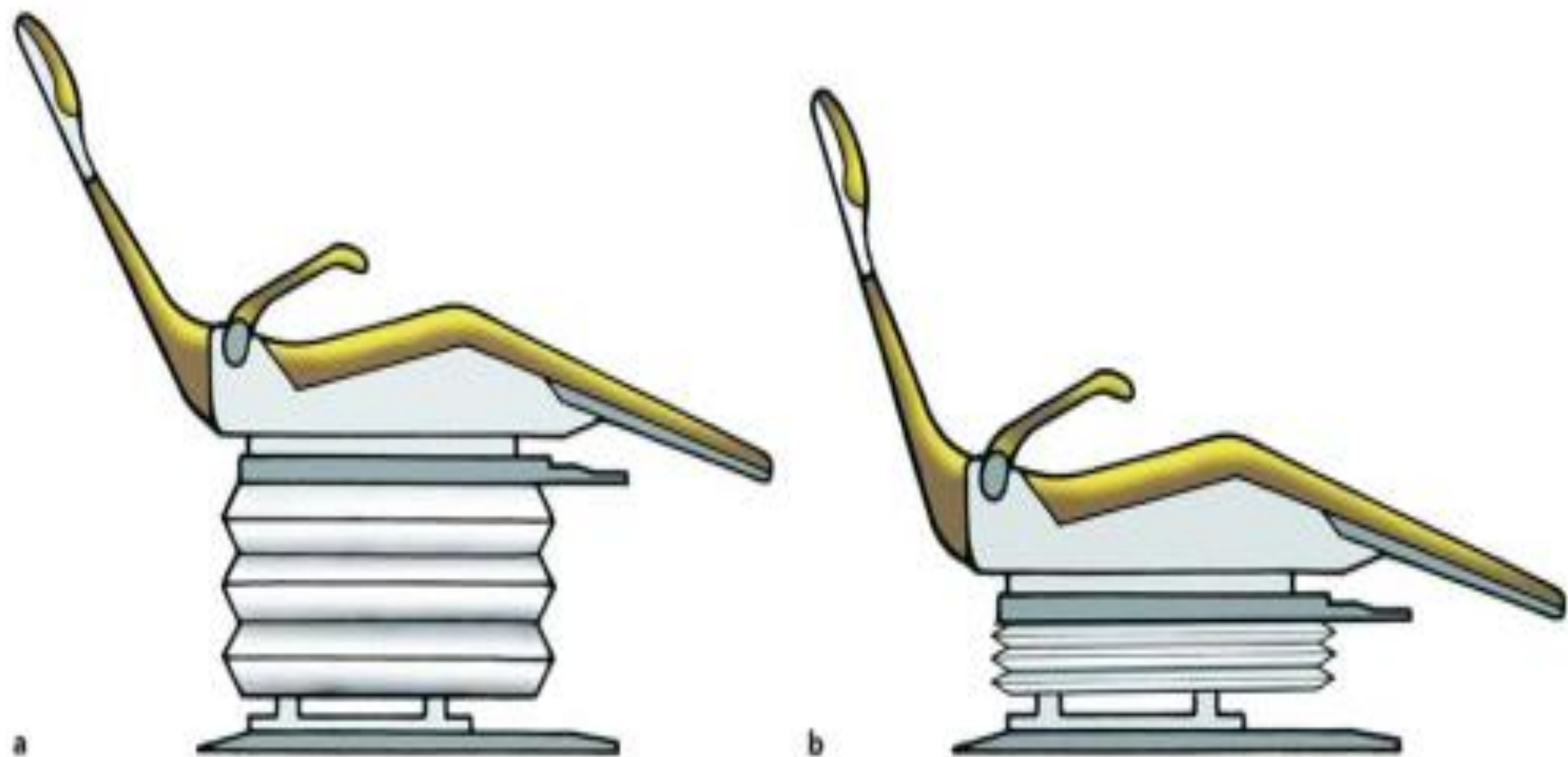
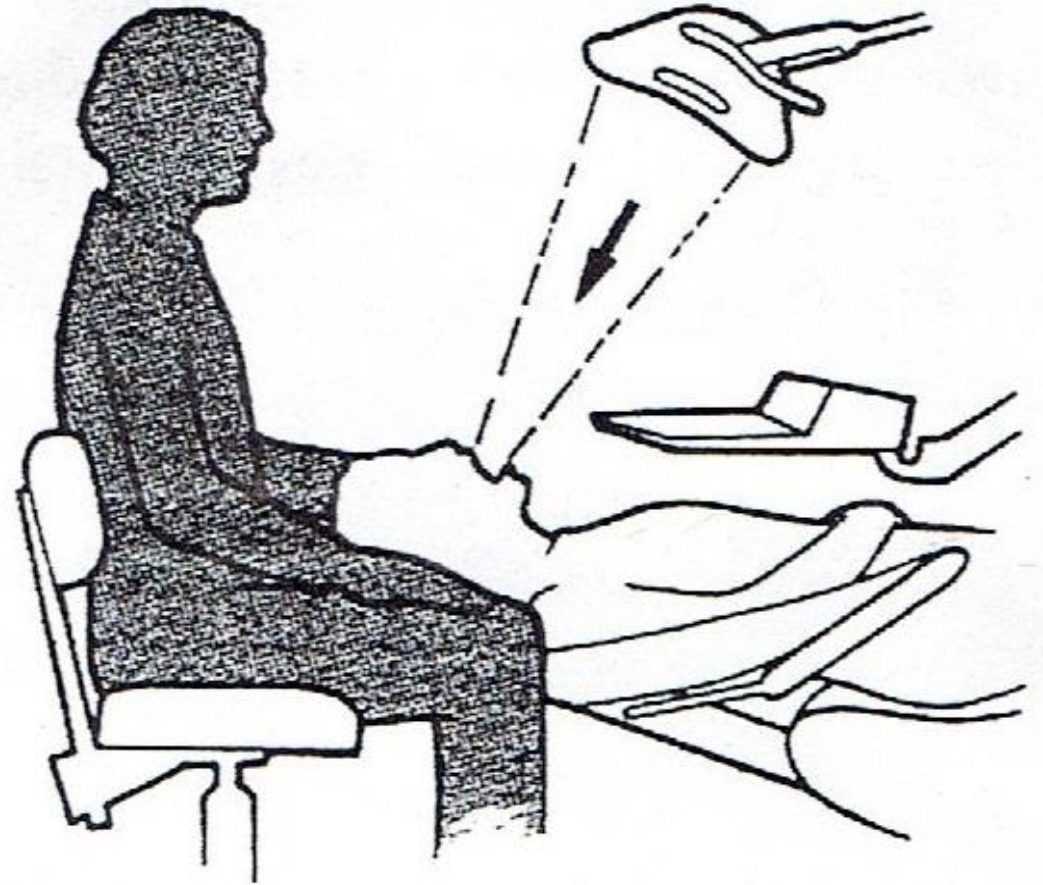


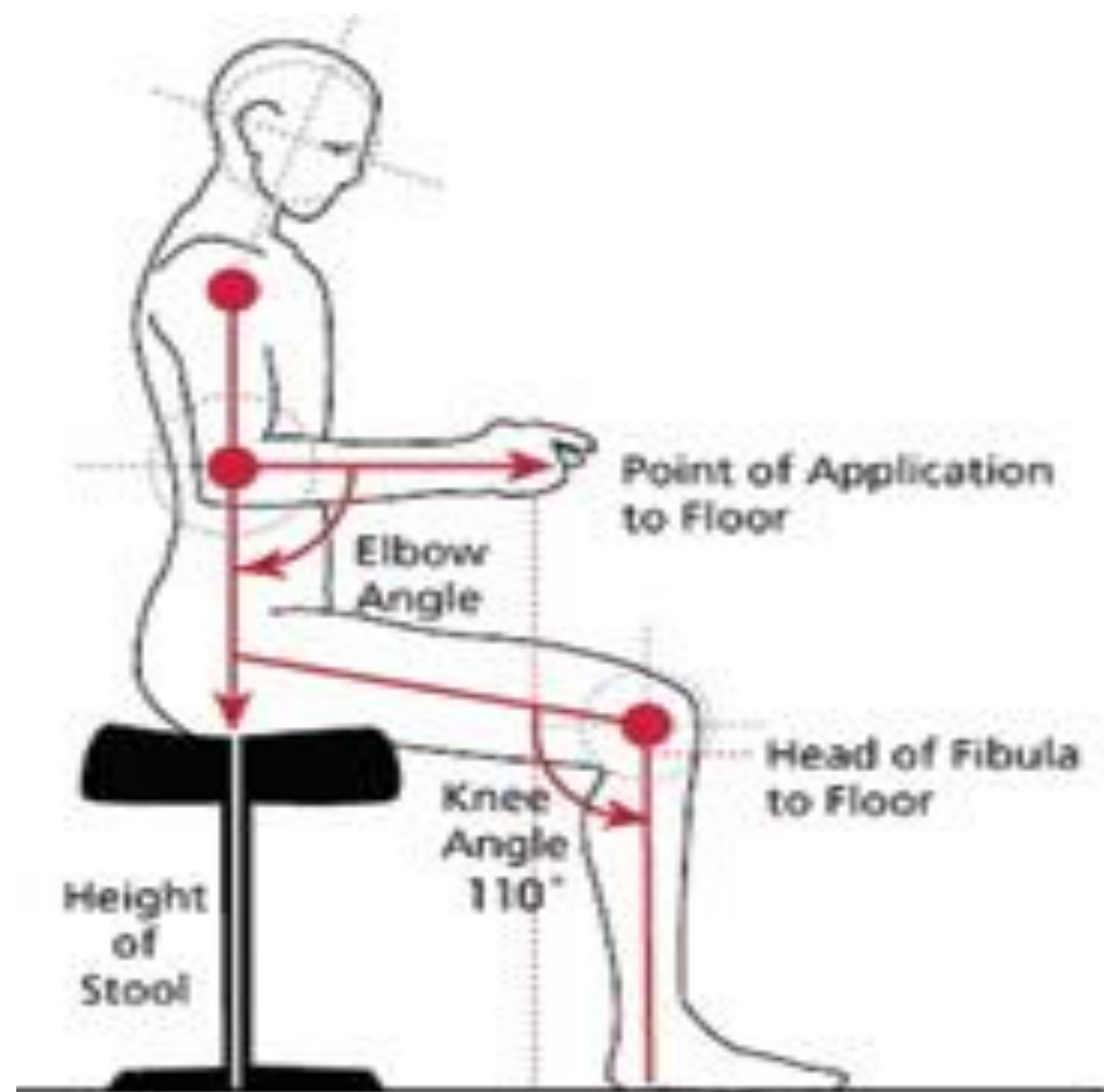
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Extractions with the surgeon seated:-

Extraction of teeth mostly performed in standing position for better control especially for beginners but may be performed in seating position, but you have to adjust the chair position and height and the patient in supine position and the operator seated on mobile chair moving in arc about patient head. So routinely not recommended because tooth, root, fillings may fall back into the pharynx, so you have to take adequate steps or precautions to prevent this. Also it needs training (not suitable for beginners).





Leg Balanced Seating

General considerations:

1. The patient's head should be rotated according to need of operator.
2. Maintain a space between the patient and the operator to reduced contact with patient.
3. The operator should never rest his hand on patient's face
4. The chest of patient should never be used as trays to keep instruments
5. The left hand should be kept free to retract using the mouth mirror, or the fingers to support the mandible or the alveolar bone.

The dental surgeon should attempt to have:-

1. Quick, efficient, unhurried and methodical approach to his work.
2. Sympathetic encouragement, to gain confidence and cooperation of the patient.
3. You have to avoid increasing the misgivings of the patient by displaying instruments.
- 4- Good preoperative evaluation.
- 5- Arrangements and appointment for difficult cases which needs special handling
6. The dressing of the operator should be suitable.

Control of infection:-

1-Try to do your work in aseptic environment, reducing the chances of contamination-clean tray, gloves, mask, trimmed nails. Tied hairEtc.

2-never reuse instrument or dressing in direct or indirect contact of a patient for other patients .e.g. dental syringe, gloves, dental mirror.

3- All patients must be viewed as a having a blood borne disease that can be transmitted to the surgical team and other patients.

Surgeon Preparation

- Surgeons must prevent inadvertent injury or transmission of infection to their patients or to themselves.
- To prevent this transmission, surgical gloves, surgical mask, and eyewear with side shields are required.



A black and white photograph of Albert Einstein. He is shown from the chest up, looking slightly to the right of the camera with a thoughtful expression. His hands are clasped together in front of him. The background is dark and out of focus.

**"LIFE IS LIKE RIDING A BICYCLE. TO KEEP YOUR
BALANCE YOU MUST KEEP MOVING."**

ALBERT EINSTEIN

 Lifefuck Quotes