

Ergonomic objections against an instrument console with hanging down hoses near the patient chair and with tray for instruments above the patient.

1. Either the tray with hand instruments is positioned within the normal distance for gripping instruments from the tray and putting these back, while the instruments of the instrument console are positioned then too far away. Or the instruments of the instrument console are placed within the normal distance for gripping and replacing these, while the hand instruments are positioned too far away.
2. Even when the distance for reaching the instruments of the instrument console is normal, always an exorotation of the arm is necessary, i.e. a far sideward rotating of the lower arm for gripping and replacing the instruments. Together with a more or less sideward bending and rotating of the upper body (depending on the position of the instruments in relation with the dentist).
3. The positioning of the instrument console is becoming more unfavourable sitting more in the direction of the 9.00 o'clock position, i.e. when the instruments are positioned more outside the field of vision of the dentist. So outside an angle of 30° to both right and left of the symmetrical = midsagittal plane of the dentists (dividing the upper body in 2 equal parts).
4. More load of the muscles is necessary for handling the instruments because no balancing of the instruments with hoses is possible.
5. The patient is enclosed by the hanging down hoses.
6. The patient can get entangled in the hanging down hoses when leaving the patient chair.
7. After a treatment the console with instruments can not be moved away, without hindrance for the patient, toward the side of the dental assistant for cleaning and disinfection.
8. The with aerosol contaminated hoses will slide along the clothes of the patient and the dentist.

During the IDS in 2007 one unit was exhibited with a tray that is made swivelling with respect to the console with instruments.

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