

Infection control in dental clinic essay sample



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The goal of infection control is to prevent the spread of infection from one patient to another patient and to the treating healthcare worker. Prevention of cross infection is the most important aspect of infection control and measures to achieve the same need to be practical and economical. Many of infection control measures called “ Universal precautions” are recommended by national dental associations and are mandatory for good clinical practice.

- Emerging infections of concern to the dentist are +1

Hepatitis B

Tuberculosis

Aids

Herpes

- Cross infection control – protocols +3

No patient-to-patient cross contamination

No health care worker to patient body fluid transfer To ensure each patient that the level of general cleanliness and sanitation will be maintained within professional standards of care in dentistry. To ensure each patient most effective infection control materials and methods will be used in office.

Universal precaution for the prevention of disease transmission as recommended by the CDC.(Centre of Disease control)

RECOMMEDATION FOR PROTECTION IN ALL DENTAL CLINICS +4

- Staff protection :

1. All staff should wear Eye protector glasses, Mask and gloves 2. All saliva & blood should be wiped from impression materials before handing over to technician. 3. Cotton balls/rolls/gauze pieces, after patient use should be

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dropped immediately into a plastic lined bucket. 4. Double gloving for all procedure.

- Patient protection :

1. Adequate sets of instruments to be made available such as a}diagnostic set, b}extraction instruments set c} surgical set, d}scaling instruments e}restorative set, so that no instrument has to be reused during the day, but can be suitably cleaned, sterilized and used the next day. 2. Disposable plastic syringes and needles are used and destroyed after use. 3. Stainless steel burs to be autoclaved between patients. 4. Patients to be given plastic/disposable bibs/fresh towels. 5. Light cure heads wiped with disinfectant like gluteraldehyde before use.

UNIVERSAL PRECAUTIONS IN DENTAL OPD +6

- Before the start of a treatment session

- Clean with detergent :

- 1) All items and equipment including

- a. chair, base, head rest, stand

- b. Side arm and tray holder

- c. Air rotor couplings

- d. Light

- e. Suction bottles {change bottles }

- 2) House keeping surfaces like

- a. Drawers

- b. Counter top

- c. Wash basin

d. Window sill and blinds

e. Floor

- Line the waste bucket with a plastic bag.
- Change hand towels or replenish tissues. Arrange sterile instrument sets, gauze and cheatele forceps, patient towels, disposable syringes and needles in the clinic.
- All treating staff should wear glasses, gloves, mask and apron.
- In between patients :
 - Wipe tray holder with a suitable disinfectant solution and clean spittoon area.
 - Change 3-way syringe tip, air rotor / surgical hand piece and light • cure tip if used.
 - Used items should be sterilized.
 - Used gauze, wrappers, syringes and extracted teeth to be carefully disposed into waste bucket.
 - Used instruments to be collected and sterilized.
 - Remove gloves and wash hands.
 - Disinfect all surface of the dental chair.
 - Prepare the serilised instrument set for the next patient.
 - Change the tumbler and give a fresh bib to the new patient.
 - Adjust the chair and light position.
 - Reglove.
 - During procedure :

The following surfaces are to be handled by the dental assistant or dental nurse wearing over gloves or a plastic wrap over the regular rubber gloves :

- a) Cheatle forcep
- b) Light handle
- c) Light switch
- d) Chair control buttons
- e) Spittoon and tumbler control switches
- f) Light cure gun
- g) Trolley handle
- h) X-ray tube and switches

- Fine instruments and materials like reamers, files, G. P.; points, and cotton balls should be retrieved with a separate sterile tweezer. Disposable syringes for local anesthetics should not be refilled for repeat injection. Discard if empty and fill a new syringe. • At the end of the day and whenever required :

- Clean the instrument tray and spittoon
- Remove the plastic bag from the bucket and send the waste for incineration. • Clean the bucket and replace the plastic bag.
- Do normal end of the day changing and resetting (mopping of floor and walls) • Run the airtor lines for 2-3 minutes to flush the hoses. • Instruments and trays should be washed, rinsed, dried, and sterilized. • Fumigate with times.

- Patient examination (consultation) :
- Dental examination should be done with mouth mirror and dental probe. Wear gloves for all manual examination and mucosal palpation.

- Used instruments should be kept in a separate tray for further washing with the detergent and sterilisation.

STERILISATION AND DISINFECTION OF INSTRUMENTS IN THE DENTAL CLINIC :

+1,+2,+3,+7 Hot air oven or steam sterilizer :

The following instruments for each day are packed and sterilized as a batch with a cycle time of 1 hour for a sterilization temperature of 160 C in a hot air(dry heat) oven. Extraction forceps and elevators

Hand scalers

Filling instruments (packed as sets)

Instrument trays and tumblers

Mouth mirrors and dental probes

Impression trays

Root canal instruments

Autoclave (steam sterilizer (Vaccum Based)) :

Materials and instruments for steam sterilization include

Air rotor hand pieces

Surgical hand pieces

Ultrasonic inserts

Surgical towels

Suture material

Cotton rolls

Gauze

Rubber gloves

Autoclavable plastic suction tips, cautery hand piece Surgical burs

Disinfection solutions

The following material are left immersed in 2% gluteraldehyde solution for a minimum of 3 hours : Diamond air rotor burs

Matrix retainers

Light cure tips

Formaldehyde (10%) can be used for

Plastic cheek retractors

Acrylic obturators and splints

PRECAUTIONS FOR KNOWN INFECTED PATIENTS : +1

1. Schedule last appointment.
2. Cover chair & equipment with disposable plastic drape
3. Treatment in enclosed, confirmed areas
4. Minimum equipments, instruments, materials use.
5. Complete sterilization
6. Disposable or sterilisable hand pieces only with retraction valves.
7. All items disposable. (what ever possible)
8. Gloves should be worn routinely even for examination.
9. Most importantly, the treating dental surgeon or hygienist should be aware of the potential risk of self injury while performing the procedure on a biohazard patient and be alert at all times. CONCLUSION:

Though all of us are agreed that sterilisation is must for dental practise, it is becoming more difficult when it is related to protection of staff, patients, and the environment. It is therefore imperative that a sound knowledge of the principles of disinfection and sterilisation be acquired and adhered to by everyone in the profession. Though a thorough and exclusive review of all <https://assignbuster.com/infection-control-in-dental-clinic-essay-sample/>

the details and practical aspects is beyond the scope of this article, it should be remembered that the basic features mentioned herein would be considered safe for practical use.

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