Special Series on Circumstances

Our series of topics for this year is designed to help you with infection control and safety by addressing some different circumstances that can occur in the office. This issue explores the important infection control considerations when treating patients with special needs. The first two issues were “So you just became the Office Safety Coordinator—What do you do now?” and “When Stuff Happens”. This current issue will be followed by “Bringing the Outside In”, “High Tech Infection Control” and “Frequently Asked Questions”.

Special Patients

Just about every dental practice experiences patients with special needs. With advances in health care, people with physical and mental challenges are living longer. Some acute and fatal conditions are now becoming chronic and manageable problems. Thus more and more patients with special needs reside in the community rather than institutions and depend upon community-based private practitioners for dental care.

Besides the geriatric and pediatric populations special patients include those with:

- developmental disabilities;
- neuromuscular disorders;
- immunocompromising conditions;
- cognitive impairment;
- mental disorders;
- trauma.

It’s estimated that about 52 million Americans have some type of disabling condition such as cerebral palsy, mental retardation, depression, spinal cord injury, visual impairment, arthritis, and muscular dystrophy to name a few.¹

Slight deviations from normal practice may be required in order to ensure a safe environment for patients and staff when treating the patient with special needs. Dental care for physically and mentally challenged patients can create special considerations that must be intertwined with standard infection control practices. Some of these include:

- office accommodation;
- patient/dentist/dental staff communication;
- frequent medical consultation;
- involvement of family/caretakers in treatment planning;
- informed consent issues;
- potential for drug interactions/side effects;
- behavior management;
- airway protection;
- short appointments;
- disease prevention;
- frequent preventive health visits;
- patient and caregiver education in prevention.¹

More details about the care of special patients are given in Putting It All Together (page 3).

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Learning Objectives

After reading this article, the reader should be able to:

- give examples of special patients;
- list some circumstances that may need to be considered when caring for special patients;
- describe what to do if a patient with known or suspected active TB comes into the office;
- describe one way to provide office staff information about gloving.
Did You Know?

The need for oral health care is the most prevalent unmet health care need among US children and adolescents with special health care needs. Access the following link for a fact sheet about the problem, challenges and opportunities.
http://www.first5oralhealth.org/page.asp?page_id=432

A pediatric emergency physician, Alson S. Inaba, MD, at Kapiolani Medical Center for Women and Children in Honolulu has identified a way to keep time while performing CPR on a victim of cardiac arrest. The classic “Stayin’ Alive” song by the Bee Gees apparently has a beat that is close to 100 beats per minute, the same rate that is recommended by the American Heart Association for chest compressions during CPR. Access the following links to read the results of findings when the University of Illinois Medical School studied the effect that the song had in keeping time during CPR.
http://firstaid.about.com/od/cprbasics/qt/07_cpr_tips.htm
http://www.msnbc.msn.com/id/27221281/

What’s Wrong With This Picture?

ANSWER: Patient and operator are not wearing eye protection.
Putting It All Together

OSAP and the ICIP staff thank Dr. Paul E. Subar for contributing the following information about caring for special patients. His contact information is:

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These are some considerations when caring for special patients.

- Comply with Americans with Disabilities Act (http://www.ada.gov/pubs/adastatute08markscrdr.htm) to accommodate wheelchairs.

- Assure that cabinets are locked when patients who have behavioral problems are in the office.

- Be current with emergency procedures when medically compromised patients are under treatment.
  - If a patient has a history of seizure disorder is under care, make sure you have contact information for care giver or primary care provider should this be necessary.

  - Patients with cerebral palsy or multiple sclerosis may have an attenuated gag reflex and are more prone to aspiration of objects. Be aware of this prior to treatment.

  - Conduct routine inventory control of emergency medical equipment, automated external defibrillator (AED), oxygen, emergency medication kit.

- Patients with cognitive impairment or other developmental issues may be combative. In this case, the patient should be appointed when there is minimal traffic in the office. Have appropriate personnel on hand.

- Sometimes patients who have severe medical issues are unable to take care of their daily hygiene. It is critical that a care giver be available if patients soil themselves.

- Consent issues
  Not all care givers can give consent for their clients. Before treatment, assure that the appropriate person gives consent for treatment if the patient cannot.

- Dental chair position
  Some patients have medical conditions that require them to be seated in a more upright position during treatment. This includes patients who have airway management problems and excess secretions.

- Bite Block/Mouth Prop
  Using a mouth prop can help the dental team safely examine and treat patients with special needs. Custom mouth props can be fabricated from several tongue depressors taped together at the desired thickness.

- Lifts/Slides
  Moving patients from wheelchair to dental chair can safely be facilitated with lifts. These are mechanical devices that use a sling under the patient to lift and move them from the wheelchair to the dental chair safely. Alternative to this is the use of a slide board. Placed between the chairs, the patient can safely be moved without the use of a lift.

- Head Rest
  If it is not feasible to move the patient to the dental chair, use of a wheelchair mounted headrest can assist the provider in comfortably delivering care while the patient is in the wheelchair.

- Radiographs
  Taking x-rays on the patient with special needs may present some unique challenges in terms of compliance. It is possible to use intraoral film/sensors outside of the mouth and take x-rays accordingly using an oblique positioning of the x-ray head.

Additional considerations
Sometimes a patient needs to remain in a wheelchair during care. Although most of the chair is covered by the patient's body (just like in a dental chair), some contamination of the handles and arm rests may occur. Consider covering exposed chair parts to avoid contamination and subsequent and difficult cleaning and disinfection. This will prevent the wheelchair from serving as a fomite for contaminants obtained during care.

Continued on page 5
Communicate and Educate

Some patients with certain infectious diseases or allergies need special considerations before care is given.

**Oral/facial herpes:** Except in situations involving emergency relief of pain or uncontrolled infections, patients with active (weeping) oral/facial recurrent herpes simplex lesions should not be treated due to the possibility of unintentional spread of the infection to uninvolved areas of the patient’s face or mouth and increased discomfort for the patient. Educate clinical office workers on how to detect possible oral/facial herpes so that patients with such lesions can be properly managed. For example, the dentist can be notified to examine a suspect patient before a prophylactic begins.

**Tuberculosis (TB):** Although standard precautions as recommended by the Centers for Disease Control and Prevention (CDC) greatly lower the risk of occupational exposure to respiratory disease agents, they do not offer adequate protection against the spread of Mycobacterium tuberculosis. The vast majority of dental offices are not equipped to treat patients with active pulmonary tuberculosis. Offices do not commonly have negative air-pressure systems in treatment areas. Also the treatment area air is not normally exhausted to the outside or passed through a HEPA-filter, and the surgical masks commonly used do not prevent inhalation of M. tuberculosis droplet nuclei. Thus CDC has developed guidelines for prevention of TB in dental settings. Patients with a medical history or symptoms suggestive of undiagnosed active tuberculosis (coughing up blood, night sweats, fever of unknown origin, and weight loss) should be referred promptly for medical evaluation of possible infectiousness. Such patients should not remain in the office any longer than required to arrange a referral.

Although dental health care workers in the office are not responsible for diagnosis or treatment of TB, educate them to:
1. understand its mode of transmission;
2. recognize its clinical signs and symptoms to help with prompt detection;
3. realize the potential for occupational exposure in the office.

CDC also recommends that the office develop, maintain and implement a written TB infection control plan.

**Latex allergy:** In regard to treating patients with a latex allergy, communicate to everyone in the office when such patients are scheduled for care. This will help ensure that a latex-safe environment is maintained during that patient’s appointment. For example, a worker using powdered latex gloves in another part of the office can generate airborne latex allergens in the glove powder that may spread through the air to the allergic patient causing a reaction.

**Around the World**

In line with the new hospital directives at the University College Hospital Ibadan Nigeria to beef up infection control at various clinics, the Dean Faculty of Dentistry inaugurated an infection control committee to look into the unique nature of dental practice in Nigeria with a view to attaining an infection free environment. The team is chaired by a community/public health dentist. The Dental Surgery Assistants, who in this part of the world run the day-to-day affairs of the clinics, have been given the mandate to ensure that bio-safety is maintained as much as possible by following new laid down regulations. Most of these regulations are in keeping with those of western societies. In addition, it becomes mandatory for new staff, e.g., interns and nurses, to be tested for hepatitis and TB before being assigned.

Jonathan Lawoyin, DDS, MMSc
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A few weeks ago I was sitting in my office in a deserted campus. There was an outbreak of seasonal influenza in Mexico and the authorities instructed the population to avoid public places. A large dental school such as ours is a very intensive interface between the university and the community around us. Dentists, adequately trained in infection control, could help disseminate information about this seasonal influenza and educate the public about Respiratory Hygiene/Cough Etiquette in Healthcare Settings (http://www.cdc.gov/flu/professionals/infectionControl/resphygiene.htm). Another infection control challenge: every April-May our school celebrates an International meeting. Over 6,000 dentists from 12 countries were under one roof for 4 days!

Enrique Acosta-Gio, DDS, PhD
National University, Mexico
Putting It All Together

continued from page 3

If patients soil themselves or vomit while in the chair, staff needs to know what to do BEFORE it happens so staff confusion doesn’t agitate the patient even more. Also, if their uniform becomes visibly soiled from patients’ excrement, OSAP suggests that the office keep a spare uniform on site for this situation or switch to the knee length outer garment. Remember, Occupational Safety and Health Administration (OSHA) requires that protective clothing cover the skin, work clothes, street clothes and undergarments.4

If packaged and sterilized instruments are transported to extended care facilities, consider placing them in a protective covering or container to avoid any excessive environmental contamination during transport. Also take along appropriate, closable, puncture-proof containers (e.g., covered plastic tubs; sharps containers) to transport contaminated instruments and other items back to the office for proper disposal or decontamination. If large equipment (e.g., portable chair, light, etc.) is taken to the site, consider cleaning and disinfection at the site before they are returned to the office. This will avoid spread of contamination during transport.

When you call an extended care facility to remind them about a patient’s appointment in the office, have them remind the patient or their care giver to bring their medication history. This may also apply to other special needs patients not in extended care facilities.

Since care givers may accompany special patients to the office, appropriate PPE needs to be available as indicated in the next issue of Infection Control In Practice.5

Additional information on the care of special patients is available.1-6

“Thanks” to our SPONSORS

OSAP thanks the following companies that help to underwrite each issue of this special series of Infection Control In Practice in 2009.

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SciCan Inc., the final word in all dental instrument reprocessing.

Septodont ➤ septodontusa.com
Septodont, providing better dentistry through pain control, restoratives and infection control products.

SmartPractice ➤ smartpractice.com

SPSmedical Supply Company ➤ spsmedical.com
Sterilization monitoring (spore tests), chemical indicators/integrators and packaging products (wrap and pouches).

Sultan Healthcare ➤ sultanhealthcare.com
Products to complete the cycle of infection control.

TotalCare ➤ kerntotalcare.com
Offering high-quality infection prevention products to protect staff and patients in the dental operatory.
Roadmap to OSAP

If you have received this newsletter from a friend or associate, you can access other helpful resources and timely information on infection control and safety by becoming a member of the OSAP community.

**Member resources include:**

► Infection Control Educator’s Kit
► NEW online CDC Guidelines course
► Links to FDA patient safety news, traveler’s guide to safe dental care, and much more!
► Topical updates such as recent information on Influenza A(H1N1)/swine flu
► Written referenced responses to your IC questions

**Member registration is easy.**

Online at [www.osap.org](http://www.osap.org) or by phone: 1-800-298-OSAP (6727) within the U.S. or 1-410-571-0003 outside the U.S.

**Current membership levels:**

► Individual member (within the U.S.) $110
► Web-only member (anywhere) $100
► Corporate memberships are welcome; please contact OSAP for more information.

**Glossary**

**Droplet nuclei:** Potentially infectious microscopic particles (5 micrometers or less in diameter) that can remain suspended in the air for long periods of time; formed by dehydration of airborne droplets containing microorganisms. They are important in the spread of TB.

**Fomite:** any inanimate object or substance capable of carrying microbes and hence transferring them from one individual to another.

**Negative air pressure:** When the air pressure in a room is lower than the air pressure in the hallway, the room is said to have negative air pressure. This keeps air and airborne microbes from escaping the room into other parts of the facility.

**Special Patient:** The Special Care Dentistry Association defines this term as an individual with special needs, including physical, medical, developmental and/or cognitive conditions, resulting in limitations in their ability to receive dental services and prevent oral diseases by maintaining daily oral hygiene.

**Standard Precautions:** Practices and procedures that integrate and expand the elements of universal precautions into a standard of care designed to protect healthcare workers and patients from pathogens that can be spread by blood or any other body fluid, excretion or secretion; applies to contact with blood; all body fluids, secretions, and excretions (except sweat), regardless of whether they contain blood; non-intact skin; and mucous membranes.

**Links to Resources**

If you wish to obtain one (1) hour of continuing education (CE) credit, complete the following test by selecting the best answer and fax or mail it to the OSAP Central Office for grading. Please include payment information to cover the grading charges. Pending satisfactory results (at least seven out of ten), you will be issued a letter for one (1) CE credit hour. OSAP is recognized by the American Dental Association as a CERP Provider. For more information, call OSAP at 1-800-298-6727 (1-410-571-0003).

For each item, pick the best answer.

1. Patients with which of the following conditions would be considered as special patients?
   a. Autism    b. Visual impairment    c. Muscular dystrophy    d. a, b and c

2. What is(are) the suggested area(s) of training of office staff about TB?
   a. Recognizing its clinical signs and symptoms to help with prompt detection
   b. Understanding its mode of transmission
   c. Realizing the potential for occupational exposure in the office
   d. a, b and c

3. Coughing up blood, night sweats, fever of unknown origin, and weight loss are symptoms commonly associated with:
   a. MRSA infections.    b. TB.    c. primary herpetic gingivostomatitis.    d. hepatitis B.

4. What’s the recommended procedure to manage a prophy patient who presents with a weeping herpes lesion on her lip?
   a. Wear two pairs of gloves and proceed with the cleaning
   b. Cover the lesion with petroleum jelly (e.g., Vaseline) and proceed with the cleaning
   c. Have the patient rinse her mouth with an antimicrobial rinse, irrigate the lesion with the same rinse and proceed with the cleaning
   d. Reschedule the patient after the lesion subsides

5. Pulmonary tuberculosis is usually spread by:
   a. drinking contaminated water.
   b. touching contaminated environmental surfaces.
   c. inhaling droplet nuclei.
   d. swallowing contaminated dust particles.

6. What should be done to sterilized packages of instruments if they are transported to an off-site facility?
   a. Place them in a protective covering or container
   b. Disinfect the instruments after arriving at the site
   c. Disinfect the packaging material before opening them
   d. Nothing

7. Which of the following could be a consideration when caring for a special patient?
   a. Office accommodation    b. Behavior management    c. Airway protection    d. a, b and c

8. A fomite is:
   a. another term for a special patient.    b. a special type of insect.
   c. any inanimate object or substance capable of carrying microbes.    d. a small four-legged animal.

9. OSHA’s bloodborne pathogen standard states that protective clothing should protect:
   a. work clothes.    b. skin.    c. street clothes.    d. a, b and c

10. What agency recommends that dental offices develop a TB infection control plan?
    a. OSHA    b. CDC    c. EPA    d. FDA

Please mail or fax completed test with the appropriate payment to receive one (1) hour of continuing education credit.

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mail to: OSAP CE, P.O. Box 6297, Annapolis, MD 21401, USA or fax to: 1-410-571-0028
(NEW! Members can now complete this CE test conveniently online at www.osap.org.)
Bright Ideas

Have a Glove Party

There’s probably no closer working relationship than the one that you have with your gloves.

Are your gloves living up to your expectations?
Do your gloves fit OK?
Is glove fit causing thumb and finger cramping?
Do you want to go powder-free?
How about colored gloves?
Is your office in a glove rut?

Some glove styles and types could make your ‘hand in glove’ tasks more efficient by improving your comfort and dexterity. Have a ‘hand-in-glove’ party.

Order some glove samples including fitted styles (left-hand/right-hand specific), ambidextrous, colored, different cuff lengths, rolled and non-rolled cuffs, powder-free, and gloves made of different materials, such as, nitrile, vinyl, latex, polyurethane, copolymer and neoprene. Try them out and check for fit, comfort, smell, tactile sensitivity, surface texture, feel when wet, ease of donning, thickness, and elasticity. Gloves are an essential part of personal protective equipment (PPE) and you may be surprised (and relieved) to find a better fit and style to suit your needs.

In the next issue... Bringing the Outside in

Submitted by: Denise Sabol, RDH, MEd, Wilton, CT