

# Geriatric Dentistry



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# Treatments Planning of the Geriatric Patient

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## STAGES OF PHYSICAL EVALUATION DIAGNOSIS , AND TREATMENT PLANNING

- PHYSICAL EVALUATION
- EXAMINATION OF VITAL SIGNS AND REVIEW OF MEDICAL , DENTAL ,MEDICATION HISTORY, ASA , CHIEF COMPLAINT and EXTRA & INTRA ORAL EXAMINATION
- INITIAL DIAGNOSIS
- CULTURE, SMEAR, SEROLOGIC , BIOPSY AND RADIOGRAPHIC CONFIRMATORY TESTS
- DIFFERENTIAL DIAGNOSIS
- FINAL DIAGNOSIS
- DEVELOPMENT OF TREATMENT PLAN & AN ALTERNATE PLAN
- INITIATION OF TREATMENT

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## Objectives of Physical Evaluation

- To establish diagnosis
- To determine pre-existing and concomitant conditions
- To manage emergencies
- Medico-legal objective

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## Techniques of Examination

- **Visualization** (color, symmetry, body development, nutrition and speech) – skin and lymph nodes
- **Palpation** (consistency, mobility) bimanual and bidigital
- **Percussion** – sinuses and teeth
- **Auscultation** – TMJ and Blood pressure

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## Considerations in Diagnosis and Treatment Planning

- **PHYSICAL EVALUATION**
- Vital Signs
  - Pulse
  - Blood Pressure
  - Temperature
  - Respiration

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## Considerations in Diagnosis and Treatment Planning

- **PHYSICAL EVALUATION**
- **Medical History**
  - Premedication (A.H.A. guide line )
  - Aggressive removal of infection source in diabetic patients
  - Sedation in uncooperative patients e.g. Alzheimer's patients

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## Considerations in Diagnosis and Treatment Planning

- **PHYSICAL EVALUATION**
- **Medication History and Poly-pharmacy**
  - Xerostomia
  - Lichenoid drug eruptions
  - Cytotoxic (chemical) ulcerations
  - Anticoagulant therapy :
    - a)coumadin
    - b)plavex
    - c)aspirin

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## ASA CLASSIFICATION

### Patient Health Status Classification (ASA 1)

- I. Patients with no systemic diseases
- Able to run 2 minutes or longer; climb two flights of stairs without experiencing shortness of breath or any discomfort
  - Diastolic blood pressure up to 89 mm/hg

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**Patient Health Status Classification (ASA 2)**

Able to walk 2 city blocks at a fast pace; climb two flights of stairs without experiencing shortness of breath or any discomfort

- Diastolic blood pressure up to 90-104 mm/hg
- Well controlled – non-insulin dependent diabetes
- Well controlled epilepsy, no seizure within a one-year period
- Well controlled hypertension
- Well controlled asthma or allergies
- Healthy individual with extreme fear of dental treatment
- Patients above 65 years

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**Patient Health Status Classification (ASA 3)**

Patient should be able to walk at regular pace with limited physical activity. Unable to climb 2 flights of stairs without experiencing shortness of breath or discomfort

- Insulin dependent diabetes
- COPD
- Angina pectoris history
- Anticoagulant therapy
- Prolonged steroid therapy
- Diastolic blood pressure of 105-114 mm/hg

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**Patient Health Status Classification (ASA 4)**

Patients with incapacitating or life-threatening diseases

- Patients unable to do light activity, even for a short period of time – experiencing discomfort while at rest
- Uncontrolled diabetes
- Unstable angina
- Acute myocardial infarction or stroke within last 6 months
- Renal dialysis
- Hemophilia
- Diastolic blood pressure higher than 115 mm/hg

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## Considerations in Diagnosis and Treatment Planning

- **PHYSICAL EVALUATION**
- Examination
  - Extra oral examination
  - Intra oral examination

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## Considerations in Diagnosis and Treatment Planning

- **PHYSICAL EVALUATION**
- **Laboratory results**
  - Radiographic interpretation
  - Hematological analysis
  - Biopsy reports
  - Cytology
  - Microbiological culture reports

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## Diagnosis Phases

- **Initial Diagnosis**
- **Differential Diagnosis**
- **Final Diagnosis**

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## TREATMENT PHASES

- **Emergency Care**
  - Infection and loose teeth
  - Prescribing medications for painful conditions
  - Denture related problems causing pain

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## Treatment Phases

- **Disease Control**
  - Initiation of daily **oral hygiene procedures**
  - **Extraction** of teeth/roots with poor prognosis
  - **Elimination** of pathological conditions
  - **Treatment** of hard and soft tissue conditions
  - **Restoration** of teeth, and **replacement** of missing teeth when it is advisable

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## Treatment Phases

- **Maintenance and recall evaluation**
  - Recall from 3-6 months

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## Surgical Considerations in Geriatric Patients

- **Controlled medically compromised** patient can tolerate stress of oral surgery if it is well planned (**One Hour or Less**)
- **Multiple extractions** should be performed over **several visits**

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## Surgical Considerations in Geriatric Patients

- **Team approach** with physician, rehabilitation therapist, social worker and psychologist is critical
- **Minor oral surgery** under local anesthesia (L.A.) **can be done in an office setting**

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## Preoperative Sedation in Older Patients

- **Safest drugs are lorazepam (Ativan), and Oxazepam (Serax), neither drug shows an altered half-life**
- **Librium and Diazepam (Valium)** shows an increased half-life, volume of distribution and decreased clearance

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## Local Anaesthetics use in Geriatric Patients

- **Xylocaine and carbocaine** (with or without neo-cobefrin) should be used with caution – **reduced dosage**
- It is advisable **not to use more than 1.5 to 2 carpules of 2% mepivacaine** plus 1:20,000 Levonordefrin (Neo-cobefrin)
- Alternatively **use 3% mepivacaine**
- However, **the vasoconstrictor of choice is levonordefrin 1: 20,000**

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## Local Anaesthetics use in Geriatric Patients

- **Other vasoconstrictors with decreased cardiac effects include:**
  - Phenylephrine 1 : 25,000
  - Levaraternalol 1 : 30,000
- **Injection should always be made slowly with aspiration** to avoid intravascular injection

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## Surgical Considerations in Geriatric Patients

- Patients with **history of angina** consider premedicating with **sublingual N.G. oral nitrate e.g. Nitrobid**
- Patients with **history of Hypertension, CVA, Angina Pectoris, CHF, Arrhythmias, and M.I.** consider **reducing the use of vasoconstrictors**

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## Hospital Setting is Best for

- Multiple extractions or general anaesthesia
- Surgery for patients on anticoagulants
- Patients who require hospitalization due to limited social support
- Patients who suffer from psychological problems or extreme agitation

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## Surgical Considerations in Geriatric Patients

- Careful attention to complicating local factors e.g. Osteoporotic bone changes  
→ Fracture  
Ankylosis of the tooth → Fracture

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## Surgical Considerations in Geriatric Patients

- Geriatric patients with odontogenic infections require more aggressive treatment such as removal of retained roots, cysts and abscess treatment
- Careful exodontia with the least traumatic or bleeding complications

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## Surgical Considerations in Geriatric Patients

- Ridge augmentation or vestibuloplasty with skin grafting can treat resorbed ridges
- Titanium implants can be a viable alternative

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## Restorative Considerations in Geriatric Patients

- Glass ionomer cements (G.I.) is the restorative material of choice for elderly patients suffering of hypo-salivation, however (GI) lacks color stability
- Root caries and recurrent decay are the most prevalent caries in the elderly
- Secondary caries are often recurrent due to marginal breakdown or restoration fracture
- It is sufficient to excavate the decay and place a secondary restoration

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## Prosthodontic Considerations in Geriatric Patients

- Saving natural teeth for as long as possible must be encouraged
- Patients must be motivated to tolerate dentures, and encouraged to take their dentures out of their mouth each night
- Relining of dentures to accommodate supporting tissue changes will enhance retention and stability

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## Prosthodontic Considerations in Geriatric Patients

- Well-Fitting Dentures provide:
  - Functional occlusion
  - Enhance nutritional status
  - Contribute to enhanced self esteem



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## Prosthodontic Considerations in Geriatric Patients

- Ill-Fitting Dentures
  - Are not used
  - Encourage the elderly to eat softer food, high in carbohydrate and low in protein
  - Loss of self-esteem

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## Denture Adhesive contain Zinc

Excessive exposure to zinc has been reported to cause :

- Numbness, tingling or weakness in the arms and legs
- Difficulties with walking and balance
- Blood problems such as anemia.



Therefore it is advisable to suggest that patients avoid denture adhesives.

### References :

1. Wilcock S, London Z, Brewer GJ. Myelopolyneuropathy and pancytopenia due to copper deficiency and high zinc levels of unknown origin II. The denture cream is a primary source of excessive zinc. *Neurotoxicology* 2009;30:996-999.
2. Nations SP, Boyer PJ, Love LA, Burritt MF, Butz JA, Wolfe GI, et al. Denture cream: an unusual source of excess zinc, leading to hypocupremia and neurologic disease. *Neurology* 2008;71: 539-543.

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## Denture Adhesive contain Zinc

- GlaxoSmithKline (GSK) warns about a potential health risk associated with long-term, excessive use of zinc-containing denture adhesives Polli-Grip 'Advanced Care', 'Extra Strength' and 'Ultra Fresh'.



- some consumers apply more adhesive than directed and use it more than once per day. Therefore, as a precautionary measure to minimize any potential risks to these consumers, GSK has voluntarily stopped the manufacture, distribution and advertising of these products.

### • What Patients should do ?

- If you have been using zinc-containing Polli-Grip 'Advanced Care', 'Extra Strength' or 'Ultra Fresh' for several years in greater amounts than directed on the package or more than once per day, or have concerns about your health, you must:
  1. Stop using the product.
  2. Talk to your doctor.
  3. Use a zinc-free alternative such as Polli-Grip 'Original', 'Comfort Strips' or 'Powder'.



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## Harmed by denture cream? Contact a denture cream lawsuit attorney from Williams Kherkher today - 800-761-3187.

**Denture Cream Lawsuit Attorneys**  
Millions of Americans rely on denture cream every day, and they have a right to trust the products they use. Unfortunately, studies have found that many popular denture creams containing zinc may pose a serious risk to the people who use them, with side effects ranging from zinc poisoning and copper deficiency to incontinence and nerve damage. If you have suffered from health problems related to denture cream, you are entitled to financial compensation for the injustice you have suffered. The denture cream lawsuit attorneys of Williams Kherkher would like to discuss your case with you to determine if we can help you obtain the justice you have been denied. Contact us today by calling 800-229-9341.

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At Williams Kherkher, we pride ourselves on our ability to effect genuine change through the representation of our clients. We are proud to provide a diverse array of information about denture cream-related topics, including:

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- [Copper Deficiency](#)
- [Side Effects](#)
- [Consumer Awareness](#)
- [Responsibility](#)
- [Denture Creams](#)

Your health is incredibly important, and you should not have to suffer because major corporations released dangerous products. The denture cream attorneys of Williams Kherkher would like to discuss your case with you to determine if you are entitled to remuneration.

Contact Us

If you or someone you love has been hurt as the result of dangerous denture cream, you deserve representation to help you stand up for your rights and demand the justice and financial compensation you are owed. To discuss your needs and concerns with one of the compassionate denture cream lawyers of Williams Kherkher, please contact us today by calling 800-229-9341.

By submitting this form, you certify that you agree to our [privacy and confidentiality](#) and wish to be contacted regarding your inquiry.

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## IMPLANTS AS AN OPTION IN TREATMENT PLANNING OF THE ELDERLY PATIENT

### Contraindications for implants are:

- Recent myocardial infarction
- Valvular prostheses
- Severe renal disorder
- Treatment resistant diabetes
- Generalized secondary osteoporosis ?

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## IMPLANTS AS AN OPTION IN TREATMENT PLANNING OF THE ELDERLY PATIENT

- Chronic or sever alcoholism
- Treatment resistant osteomalacia
- Radiotherapy in progress
- Severe hormonal deficiency
- Drug Addiction
- Heavy Smoking habit

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## Preventive and Maintenance Considerations

- Prevention of oral disease is an ongoing process throughout life
- Electric or battery operated tooth brush facilitate oral hygiene practice by elderly with limited manual dexterity
- Care givers whether they are family members or nursing home staff must be motivated to appreciate the importance of oral care to Oral Health and systemic Health

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## Preventive and Maintenance Considerations

- Fluoride treatment, such as home use of 0.4% stannous fluoride applied in a custom tray is recommended for patients with high levels of caries activity
- Chlorhexidine (Peridex), tetracycline and metronidazole are effective antimicrobials in the elderly

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