



# Oral health & general health

# Overview

- What is ‘Senior Smiles’
  - OUR responsibilities
  - YOUR responsibilities
- How oral health impacts on general health
- Identifying oral health conditions



# What is Senior Smiles?

- Preventive oral health model of care
- Designed specifically for the RACF environment
- Translational research developed by A/Prof Janet Wallace & the Oral Health team at The University of Newcastle
- Onsite oral health practitioner
- Duty of care to residents
- Oral health support and education
- Multi-disciplinary approach to person centred care



*For Senior Smiles to work effectively to improve our residents care -* **WE MUST WORK TOGETHER!**

# How does Senior Smiles work within our RACF?

## The Senior Smiles Oral Health Practitioner Roles and Responsibilities

1. Be guided by nursing and care staff regarding residents that need urgent oral health care
2. Conduct oral health risk assessments
3. Use the findings to develop oral health care plans – to implement into daily cares for all residents
4. Advocate and refer residents for dental treatment when necessary
5. Conduct Education for: Staff, Residents, Carers
6. Assist to develop policies and procedures to address oral health management within your RACF

# How does Senior Smiles work within our RACF?

## Nursing, Care staff and Management role and responsibilities

1. Be aware of what is considered to be “Good oral health”
2. Be able to identify possible oral health issues to the Senior Smiles OHP
3. Work with the Senior Smiles OHP to implement oral health care plans into daily personal care
4. Be accountable for your residents mouth care
5. Notice and report changes
6. Participate in oral health education

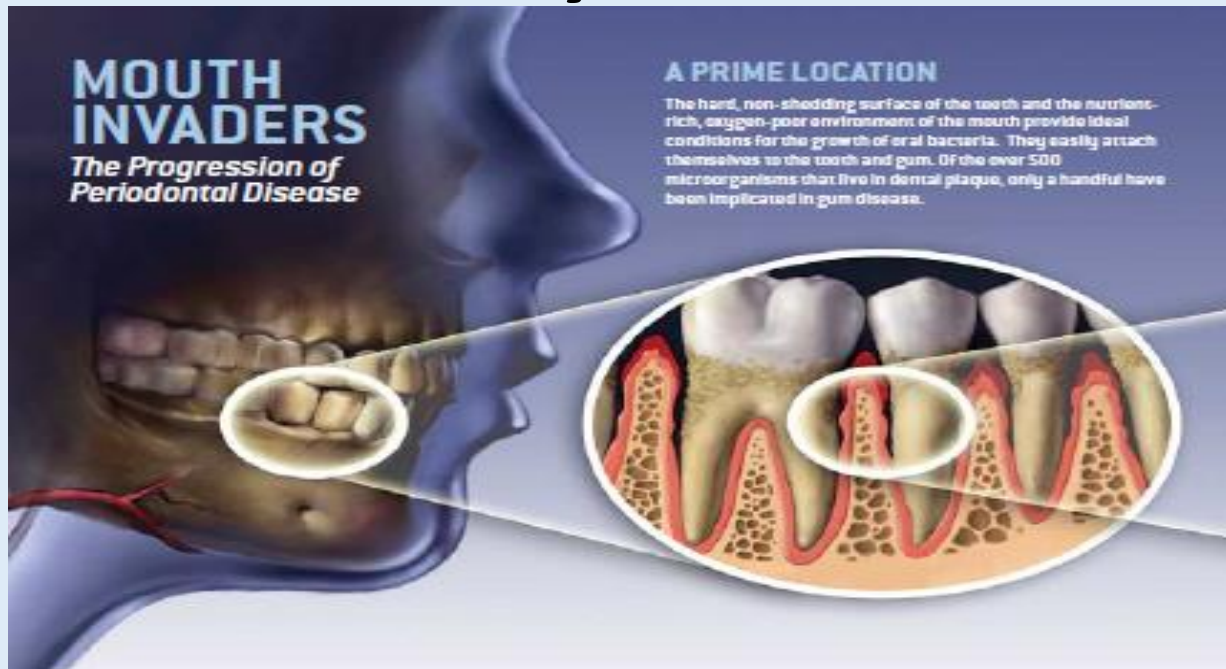
# Understanding the impact of poor oral health on general health

- Pain and infection
- Poor Quality of life
- Negative self image and negative impacts on psycho-social wellbeing
- Inability to eat and enjoy food
- Poor nutrition
- Weight-loss
- Increased risk of pressure injuries and detrimental effects on skin integrity
- Risk of systemic infection
- Risk of aspiration pneumonia
- Diabetes
- Heart disease

.....and the list goes on

Did you know.....?

***“There are more bugs in your mouth than the total human population on the planet”***  
***Promo for SBS Program “Secrets of the Human Body” March 2014***



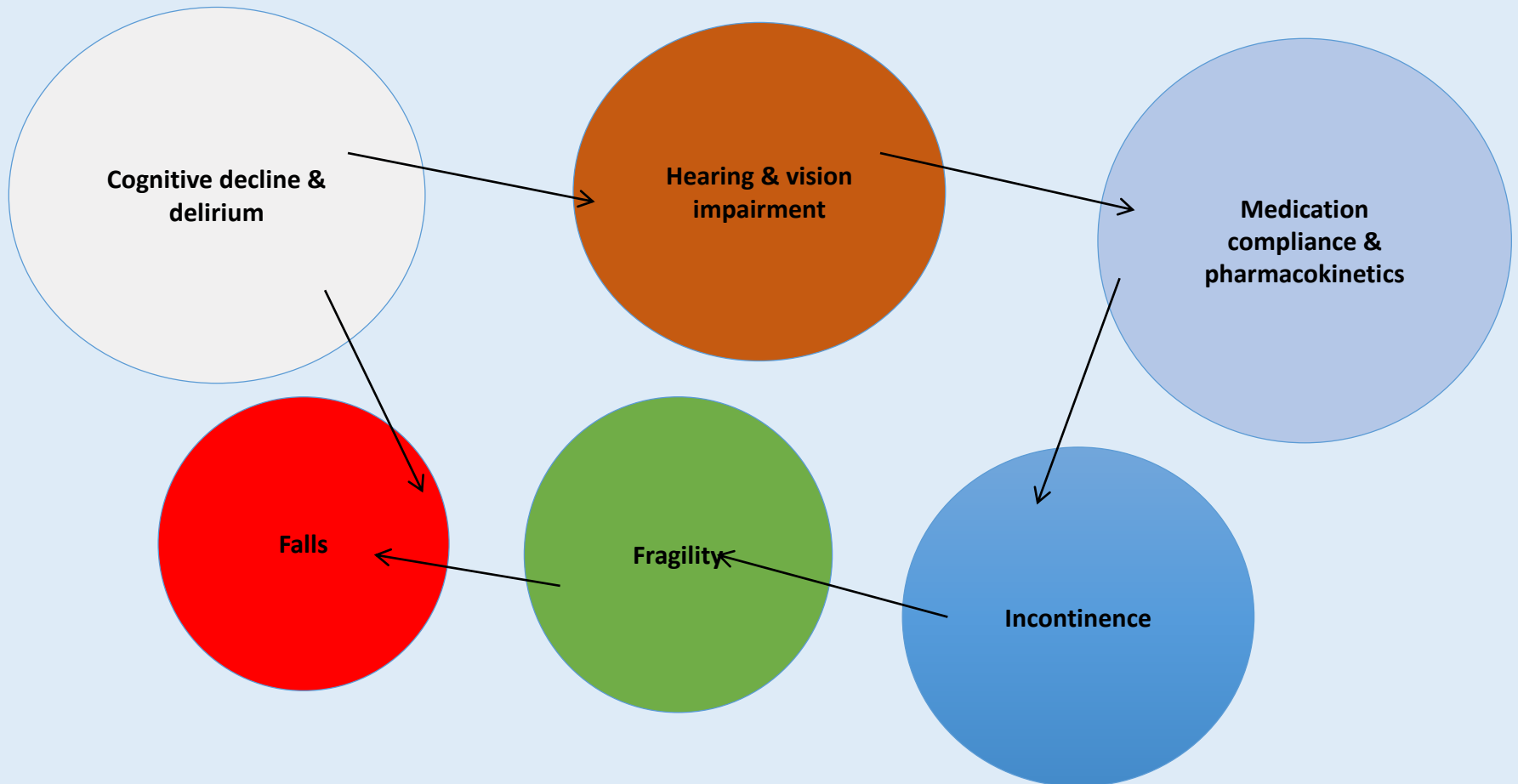
It is our “duty of care” to ensure we give our residents the best possible opportunity for health, comfort and happiness!



**This includes providing optimum  
ORAL HEALTH CARE**



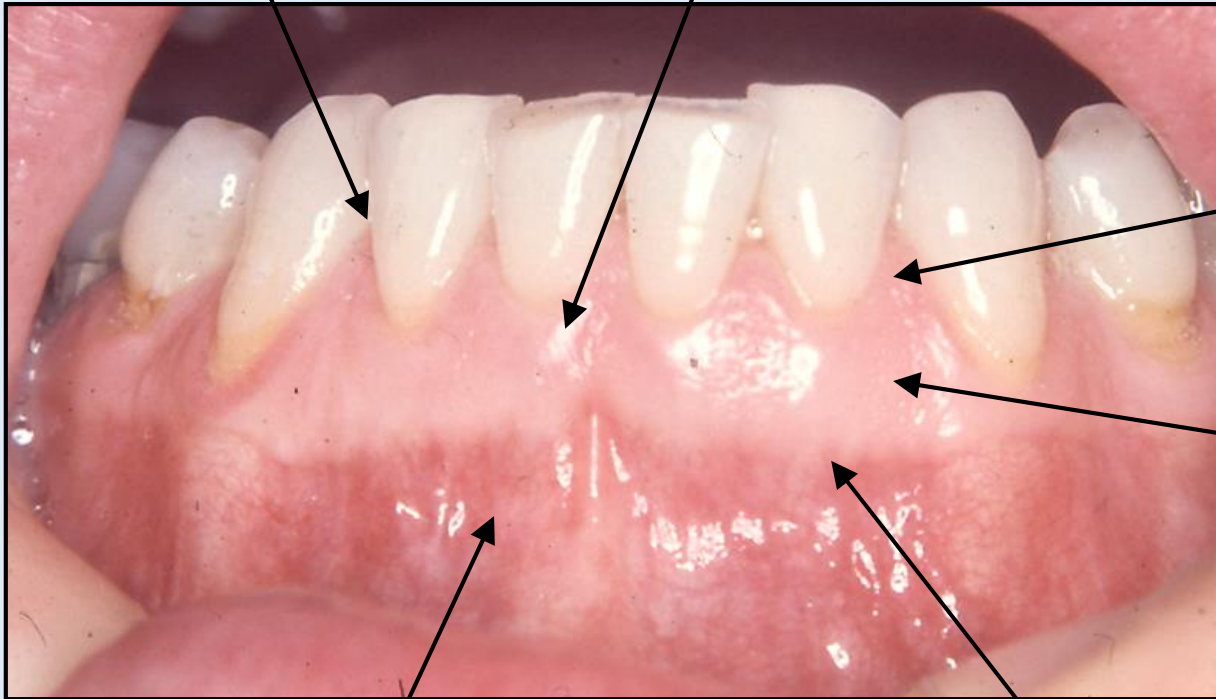
# Geriatric Giants



# Healthy Gingiva

Tip of interdental papilla-  
part of free gingiva

Scalloped free gingival margin



Interdental  
papilla

Attached  
gingiva

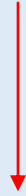
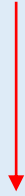
Alveolar mucosa

Muco-gingival junction



Interdental papillae. **Triangular.**  
Apex is part of the free gingiva, base is  
composed of attached gingiva

# Healthy and diseased gingiva



Healthy gingiva



Severe chronic gingivitis

# Healthy and diseased gingiva

Characteristic	Healthy	Diseased
Colour	Pink (Only in Caucasians)	Red, bluish-red, purple
Texture	Firm	Soft, 'spongy' or very firm; fibrotic
Contour	Scalloped	Loss of outline
Margin	Knife-edged	Rolled or blunt
Surface	Keratinised, stippled (40%)	Homogenous and smooth

# Characteristics of Gingivitis – Signs and Symptoms

- **Change in colour :** Gingiva becomes more red (erythematous), and may later become more purple (cyanotic) in chronic disease
- **Change in contour:** Gingiva becomes enlarged (hyperplastic), margins become more rolled, papillae may become blunted, Normal scalloping no longer evident. Recession occurs if attachment is lost
- **Change in consistency:** Gingiva becomes softer, fluid filled (oedematous) or in chronic cases becomes thickened (fibrotic)

# Characteristics of Gingivitis – Signs and Symptoms

- **Change in texture:** Surface becomes more homogenous, smooth and shiny, surface detail such as stippling is lost

**Bleeding:** when eating or brushing

- **Bad breath:** Halitosis. Delicate subject. Patient concern about it as a possibility may be a good motivational tool



# Diabetes associated gingivitis





# Calculus

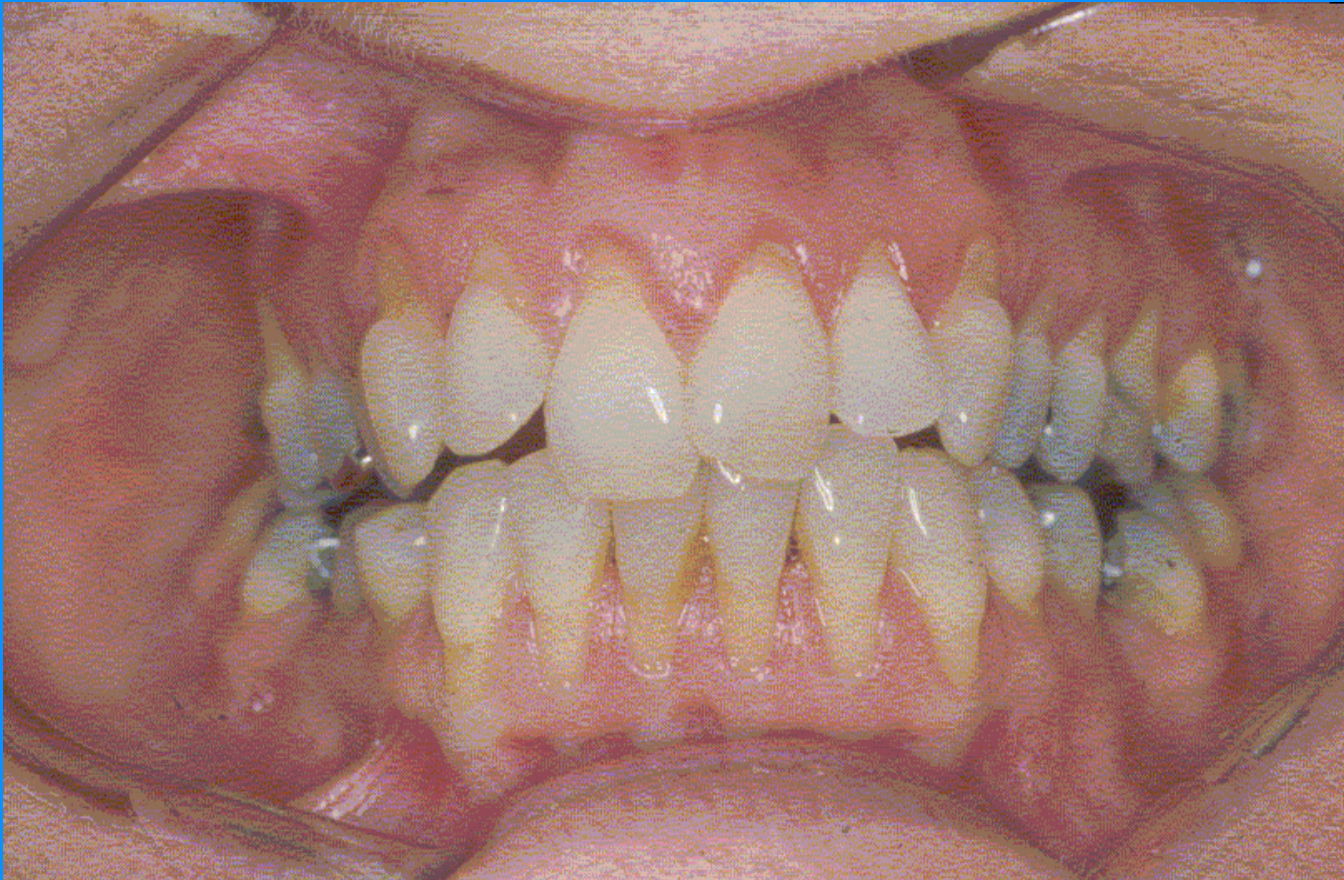


# Calculus





# Generalised Recession



# Periodontitis – Signs and Symptoms

## Characteristics of Periodontitis

- **Change in colour** : Gingiva becomes bright red (erythematous), purplish (cyanotic) in chronic disease
- **Change in contour**: Gingiva recedes from teeth, making them look longer
- **Change in consistency**: Spaces develop between teeth, mobility occurs. Pus between teeth and gingiva. Bad breath, bad taste in the mouth

# Other common oral health conditions of the elderly

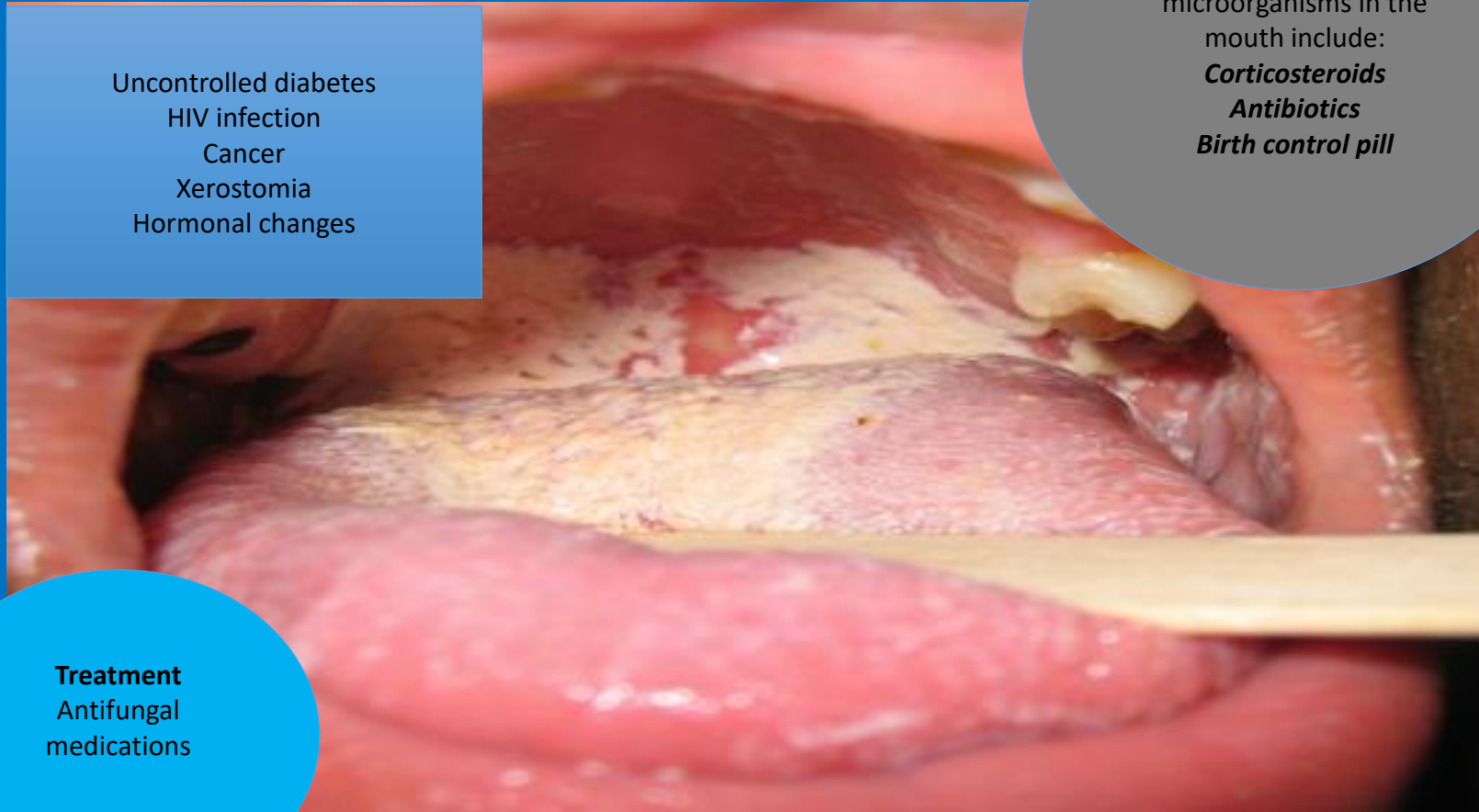
- Candidiasis (thrush)
- Ulcers
- Denture stomatitis
- Angular Cheilitis
- Xerostomia (dry mouth)
- Acute Necrotic Ulcerative Gingivitis (ANUG)
- Oral cancers

# Candidiasis (thrush)

Uncontrolled diabetes  
HIV infection  
Cancer  
Xerostomia  
Hormonal changes

Medications that upset the microorganisms in the mouth include:  
***Corticosteroids***  
***Antibiotics***  
***Birth control pill***

**Treatment**  
Antifungal  
medications



# Denture stomatitis

Denture wearers  
Diabetics



Long term denture wearing  
Ill fitting dentures that retain food particles  
Old dentures with damaged acrylic

**Treatment**  
Keep dentures clean  
Remove at night  
Quit smoking  
Chlorhexidine  
Anti-fungal drugs/lozengers



# Angular Cheilitis

Weakened immune system  
Bacteria/fungal

Drizzling  
Deep creases  
Touching  
Frequently  
moving

**Treatment**  
Antifungal  
Clotrimazole





# Xerostomia

## Medications

Salivary gland dysfunction  
Diabetes  
SLE  
Rheumatoid arthritis  
Scleroderma  
Sjogrens syndrome  
Hypothyroidism  
Sarcoidosis



Fissured tongue  
Angular Cheilitis  
Cracked lips  
Taste disorders  
Thrush  
Painful tongue  
Tongue ulcers  
Gum disease  
Tooth decay  
Sore throat  
Problems wearing  
dentures  
Problems speaking

## Treatment

Increase water intake  
Moisturise lips  
Biotene saliva products  
Sugarless chewing gum

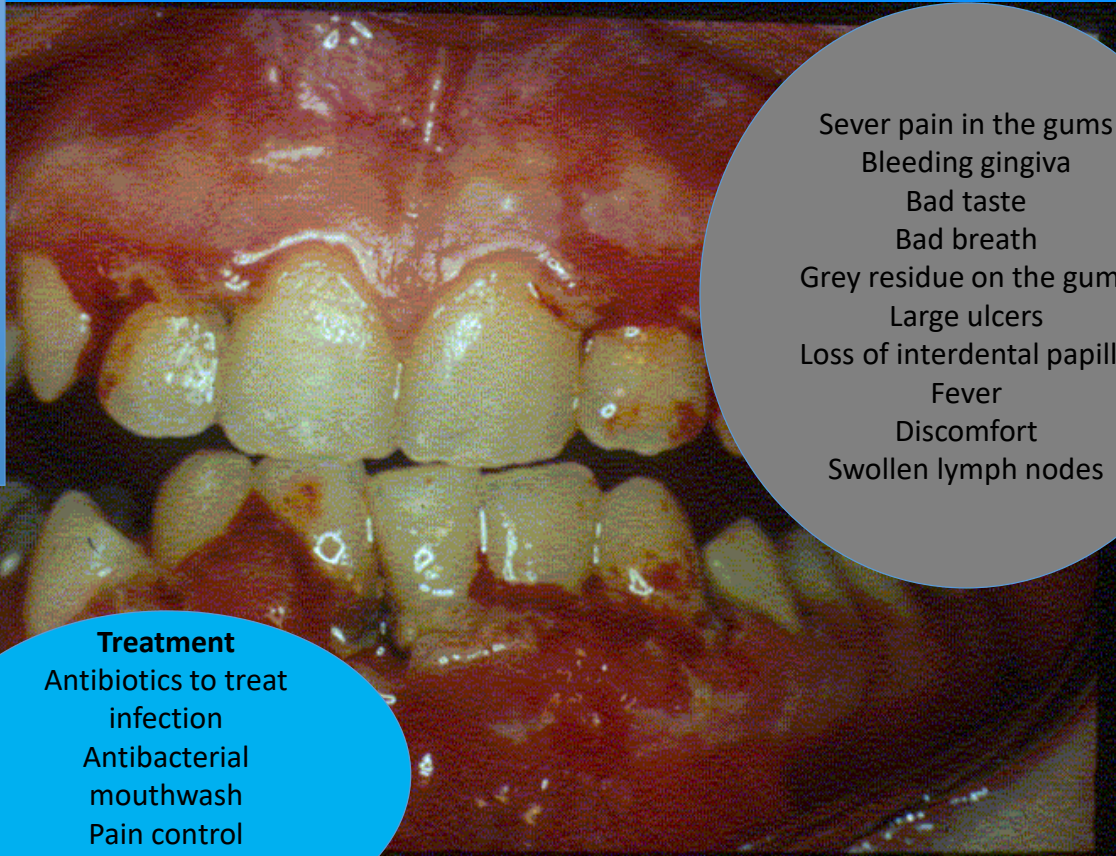
# Some drugs which can affect saliva flow

- Antiarrhythmics
- Anticholinergics
- Antiparkinsonians
- Adrenergic
- Anticonvulsants
- Antidepressants
- Antipsychotics
- Antihistamines
- Caffeine

- Antihypertensives
- Benzodiazepines
- Antiemetics
- Muscle relaxants
- Opioids
- Cardiac glycosides
- Diuretics
- Narcotics
- Statins

# ANUG

Excessive bacteria in the mouth  
Lack of oral hygiene  
Poor diet  
Vitamin deficient  
Infections in teeth, mouth, throat  
Weakened immune system  
Stress  
Smoking, drug, alcohol use in excess



Sever pain in the gums  
Bleeding gingiva  
Bad taste  
Bad breath  
Grey residue on the gums  
Large ulcers  
Loss of interdental papilla  
Fever  
Discomfort  
Swollen lymph nodes

**Treatment**  
Antibiotics to treat infection  
Antibacterial mouthwash  
Pain control  
Dental cleaning

# Oral cancer

If in doubt  
Refer to the  
dentist!!



# Complications of xerostomia

- Hoarseness and speech difficulties may lead to increased use of acidic sweets, peppermints, cough lozenges or fruit juices between meals and at night
- Difficulty with swallowing leads to the choice of a softer, more easily swallowed diet. These low fibre diets provide less salivary stimulation, and as they are easily digested lead to increased snacking
- If low fibre results in constipation, use of laxatives can contribute to dehydration, which may lead to excessive thirst, electrolyte imbalance and reduced salivary secretion



# Oral health management

- Individual oral health risk assessments
- Individual oral health plans
- Fluoride therapies
- Antifungal and antibacterial treatments
- Regular brushing
- Denture cleaning
- Management of xerostomia
- Referrals
- Dental check –ups



# References

Jill. S. Gehrig, Daniel. E. Shin, Donald. E. Willmann , 5<sup>th</sup> Edition, (2018) Foundations of Periodontics for the dental hygienist: Jones & Bartlett. NY.

A giant of geriatric medicine – Professor Bernard Isaacs (1924 – 1995). British Geriatrics Society. Available from: <http://www.bgs.org.uk/geriatricmedicinearchive/bgsarchive/biographies/a-giant-of-geriatric-medicine-professor-bernard-isaacs-1924-1995> (Accessed 26th July 2018)

Hughes LD, McMurdo MET, Guthrie B. Guidelines for people not for diseases: the challenges of applying UK clinical guidelines to older people with multiple co-morbidities. *Age Ageing* 2013; 42(1): 62–69

Olga Ibsen, Joan Phelan. 7<sup>th</sup> Edition, (2017). Oral Pathology for the Dental Hygienist: Elsevier N.Y

Chris. Van Tulleken, Xand. Van Tulleken, Andrew Cohen. Secrets of the Human Body. (2014) Harper Collins UK.

Wallace, J. P., Mohammadi, J., Wallace, L. G., & Taylor, J. A. (2016). Senior Smiles: preliminary results for a new model of oral health care utilizing the dental hygienist in residential aged care facilities. *International Journal of Dental Hygiene*, 1-5.

Wallace, J. P., Blinkhorn A.S., & Blinkhorn F.A. (2015). A qualitative study examining the preparedness of dental hygiene students for a service-learning placement in residential aged care. *International Journal of Dental Hygiene*, 1-7.

Wallace, J. P. (2015). The development of a service-learning model of health promotion in the residential aged care environment for dental hygiene students. *Australian and New Zealand Journal of Dental and Oral Health Therapy*, 1(1), 24.

Lewis, A., Wallace, J., Deutsch, A., & King, P. (2015). Improving the oral health of frail and functionally dependent elderly. *Australian Dental Journal*, 60(S1), 95-105.

Wallace, J. P., Blinkhorn, F. A., & Blinkhorn, A. S. (2014). Dental hygiene students' views on a service-learning residential aged care placement program. *Journal of dental hygiene : JDH*, 88(5), 309-315.

Wallace, J. P., Blinkhorn, A. S., & Blinkhorn, F. A. (2014). An assessment of the educational value of service-learning community placements in residential aged care facilities. *International Journal of Dental Hygiene*, 12(4), 298-304

Wallace, J. P., Blinkhorn, A. S., & Blinkhorn, F. A. (2013). Reflective folios for dental hygiene students: what do they tell us about a residential aged care student placement experience?. *European Journal of Dental Education*, 17(4), 236-240.

Wallace, J. P., Taylor, J. A., & Blinkhorn, F. A. (2012). An assessment of a service-learning placement programme in residential aged care facilities for final year dental hygiene. *Journal of Disability and Oral Health*, 13(4), 163-167.

Wallace, J. P., Taylor, J. A., Wallace, L. G., & Cockrell, D. J. (2010). Student focused oral health promotion in residential aged care facilities. *International Journal of Health Promotion and Education*, 48(4), 111-114.