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1.1 Which one of the following would be the most appropriate initial course of action in an 80-year-old man presenting with an ulcerated lesion in the anterior denture-bearing region?

A Construct new dentures
B Easing of dentures
C Excisional biopsy
D Incisional biopsy
E Urgent referral to maxillofacial unit

1.2 Which area of the mouth is most commonly affected by burning mouth syndrome?

A Hard palate
B Lips
C Retromolar region
D Soft palate
E Tongue

1.3 Which one of the following is most commonly associated with an oral diagnosis of Crohn disease?

A Clusters of ulceration
B Dysaesthesia of the tongue
C Mucosal blistering
D Mucosal tags
E Swollen lips

1.4 Which one of the following medications is most likely to be associated with a dry mouth?

A Aspirin
B Atenolol
C Bendroflumethazide
D Captopril
E Nicorandil
1.1 B

Any ulcerated lesion under a denture is most commonly denture trauma. Therefore the denture should be eased, and the patient reviewed at 2 weeks. If the lesion has not improved, an urgent referral is appropriate.

1.2 E

‘Burning’ is most frequently reported in the tongue region (80% of patients with burning mouth syndrome). Most patients who develop burning mouth syndrome are postmenopausal women. The female: male ratio with burning mouth syndrome is 7:1. This is a relatively common problem seen all over the world, eg in the Netherlands, patients with burning mouth syndrome have formed a support group. It seems to be a condition that affects people of all races and all socioeconomic backgrounds.

1.3 D

Although ulceration, swollen lips and rarely dysaesthesia can be present in patients who have Crohn disease, it is the tissue diagnosis from mucosal tags that will be diagnostic.

1.4 C

Bendroflumethiazide is a thiazide diuretic, which is mainly used to treat hypertension. Diuretics such as bendroflumethiazide make you lose circulating volume. Occasionally the patient may lose too much and become dehydrated. The patient should let his or her doctor know if he or she feels constantly thirsty, has a dry mouth or has skin that looks and feels dry.
1.5 A patient presents with angular cheilitis, and you decide to perform some haematological investigations. Which one of the following tests is not relevant to angular cheilitis?

- A Full blood count
- B Fasting venous glucose
- C Vitamin B$_{12}$
- D Liver function tests
- E Ferritin

1.6 Which one of the following drugs is inappropriate for the treatment of angular cheilitis?

- A Aciclovir
- B Nystatin
- C Miconazole
- D Fluconazole
- E Amphotericin

1.7 Target lesions are associated with which one of the following conditions?

- A Stevens–Johnson syndrome
- B Major aphthous stomatitis
- C Pemphigus
- D Pemphigoid
- E Syphilis
1.5  D

Some studies have shown that 50% of patients with angular cheilitis have haematological abnormalities. Anaemia and diabetes are the most common of these. The liver function tests are irrelevant.

1.6  A

Aciclovir is an antiviral agent, and it is used mainly for human herpes virus infections. Nystatin, amphotericin and miconazole are used topically. Amphotericin can be used systemically, but it has many side effects, so it should not be used systemically for a minor infection such as angular cheilitis. Fluconazole, however, can be used systemically.

1.7  A

Stevens–Johnson syndrome produces target lesions on the skin which look like ‘bull’s eyes’. This reaction is frequently caused by drug reactions, especially to sulphonamides. Patients can be systemically very unwell, and more often than not require admission.
1.8 What is the male to female ratio of the prevalence of recurrent aphthous ulceration/stomatitis?

A  3:1  
B  2:1  
C  1:1  
D  1:2  
E  1:3

1.9 What is the best treatment for mumps?

A  Aciclovir  
B  Prednisolone  
C  Augmentin  
D  Clarithromycin  
E  Nothing

1.10 What is the male to female ratio of patients with ‘burning mouth syndrome’?

A  7:1  
B  3:1  
C  1:1  
D  1:3  
E  1:7
1.8 C

Recurrent aphthous ulceration occurs equally among males and females.

1.9 E

Mumps is a self-resolving condition, and requires no treatment.

1.10 E

Females are far more likely than males to report burning mouth syndrome.
1.11 What is the mean age of presentation in burning mouth syndrome?

- A  18 years
- B  25 years
- C  40 years
- D  60 years
- E  80 years

1.12 A child of 14 months presents with blood-crusted lips, pyrexia and widespread oral ulceration. What is the most likely diagnosis?

- A  Teething
- B  Traumatic injury
- C  Primary herpetic gingivostomatitis
- D  Hand, foot and mouth
- E  Human papilloma virus

1.13 Which one of the following does not cause the reactivation of herpes simplex infection?

- A  Stress
- B  Sunlight
- C  Immunosuppression
- D  Local trauma
- E  Dental caries
1.11 D

Burning mouth syndrome is far more prevalent in women than in men, has a mean age of presentation of 60 years, and is rarely seen in people younger than 45 years. There are many causes of burning mouth syndrome. These include vitamin B complex deficiency, haematological disorders, undiagnosed type 2 diabetes, xerostomia, parafunctional habits, poorly constructed dentures, cancerphobia, anxiety, depression, climacteric and allergy. It is important to investigate these patients haematologically and psychologically.

1.12 C

A traumatic injury would be possible, but it is unlikely as the child has pyrexia. Teething would not cause blood-crusted lips. Human papilloma virus does not cause this. The treatment for primary herpetic gingivostomatitis is aciclovir, antiseptic mouthwash, and paracetamol to reduce the pyrexia. The child should be discouraged from touching the lesion, and their fluid intake increased.

1.13 E

The common triggers for reactivation of herpes simplex are stress, local trauma, exposure to sunlight or cold, menstruation, systemic upset and immunosuppression.
1.14 A 12-year-old child who has had chickenpox previously presents with vesicles in and around his left ear, hearing loss and some facial nerve weakness. What is the diagnosis?

- A Herpes simplex 1 reactivation
- B Herpes simplex 2 reactivation
- C Ramsay–Hunt syndrome
- D Coxsackie viral infection
- E Infectious mononucleosis

1.15 What is the usual prescription of aciclovir given to patients with acute herpes simplex infection?

- A 200 mg twice daily for 5–10 days
- B 200 mg three times daily for 5–10 days
- C 200 mg four times daily for 5–10 days
- D 200 mg five times daily for 5–10 days
- E 200 mg six times daily for 5–10 days

1.16 A 70-year-old patient presents with systemic upset, a unilateral headache around the temporal region, and a severe cramp-like pain when the patient begins to chew. They have never had any symptoms like this before. What is your diagnosis?

- A Paroxysmal facial hemicrania
- B Giant cell arteritis
- C Periodic migrainous neuralgia
- D Salivary calculi
- E Trigeminal neuralgia
1.14  C

Ramsay–Hunt syndrome originates in the geniculate ganglion of the seventh cranial nerve and is associated with varicella zoster infection. Treatment is usually with steroids and antivirals, to reduce the chance of permanent hearing loss.

1.15  D

Aciclovir is one of the unusual medicines required to be taken five times daily.

1.16  B

This is a classic presentation of giant cell arteritis, which can be a medical emergency. It requires the prompt administration of prednisolone to prevent the onset of blindness.
1.17  What would be the best blood test to aid your diagnosis in Question 1.16?

A  Full blood count
B  Liver function tests
C  Erythrocyte sedimentation rate (ESR)
D  Vitamin B<sub>12</sub>
E  International normalised ratio (INR)

1.18  A 15-year-old patient presents with pyrexia, sore throat and bilateral parotitis. However, on palpation of the parotids the saliva is clear, and there is no xerostomia. What is your most likely diagnosis?

A  Measles
B  Mumps
C  Bacterial parotitis
D  Sjögren’s disease
E  Cytomegalovirus

1.19  Which one of the following viruses is associated with Kaposi’s sarcoma?

A  Human herpes virus 1
B  Human herpes virus 2
C  Varicella zoster virus
D  Cytomegalovirus
E  Human herpes virus 8
1.17  C

ESR is a marker of inflammation, and is markedly raised in patients with giant cell arteritis.

1.18  B

Sjögren’s disease is possible, however there is no reduced saliva flow. Bacterial parotitis would produce a pus-filled saliva, and therefore it would not be clear. It would also be unusual to have bilateral bacterial parotitis. Mumps is the most common cause of bilateral parotitis. It usually settles down after 2 weeks, but patients must be aware that the complications of mumps include orchitis or oophoritis, leading to infertility. Mumps is on the increase as parents are reluctant to vaccinate their children with the MMR (measles, mumps, rubella) vaccine because of the controversy surrounding it.

1.19  E

Kaposi’s sarcoma is an acquired immune deficiency syndrome (AIDS)-related illness associated with human herpes virus 8. It has three forms: classic, endemic and epidemic.
1.20  A patient presents with a unilateral, electric shock-like pain along the course of the mandible. He says it happens when he shaves, and it is the worst pain he has ever had. What is your likely diagnosis?

- A  Temporomandibular joint dysfunction
- B  Trigeminal neuralgia
- C  Dental abscess
- D  Parotitis
- E  Paroxysmal facial hemicrania

1.21  What would be the best medication for the condition in Question 1.20?

- A  Dothiepin
- B  Fluoxetine
- C  Carbamazepine
- D  Prednisolone
- E  Amitriptyline

1.22  Which one of the following blood tests is important when monitoring patients taking carbamazepine?

- A  Vitamin $B_{12}$
- B  Ferritin
- C  Erythrocyte sedimentation rate
- D  Liver function tests
- E  Serum folate
### 1.20 B

This is the classic description of trigeminal neuralgia.

### 1.21 C

Carbamazepine is the treatment of choice for trigeminal neuralgia. Patients are usually started on 100 mg three times daily and then require an increase in the dose after a month or two to 200 mg three times daily to a maximum of 800 mg three times daily. These patients require regular monitoring. Prednisolone is a steroid, used for many conditions but not for neuralgia. The other drugs are more effective in patients with atypical facial pain.

### 1.22 D

Carbamazepine is metabolised in the liver and can lead to altered liver function and can cause drug-induced inflammation of the liver (hepatitis). It can also cause aplastic anaemia in a few patients, so a full blood count is also useful.
1.23 An 18-year-old girl presents with a grossly enlarged lower lip, angular cheilitis, full-width gingivitis, mucosal tags and cobblestone mucosae. What is the most likely diagnosis?

- A Allergic reaction leading to anaphylaxis
- B Lichenoid reaction
- C Erythema multiforme
- D Orofacial granulomatosis (OFG)
- E Lichen planus

1.24 Which gastrointestinal condition is commonly associated with orofacial granulomatosis?

- A Ulcerative colitis
- B Crohn’s disease
- C Coeliac disease
- D Irritable bowel disease
- E Hirschsprung’s disease

1.25 In patients who truly have an allergic reaction to local anaesthetic, which one of the following is the most likely cause?

- A Lidocaine
- B Adrenaline
- C Octapressin
- D Methylparaben
- E Sodium chloride
1.23  D

An incisional biopsy down to muscle will show that this patient has non-caseating granulomas and lymphoedema, which are indicative of OFG. It is associated with reactions to cinnamon and benzoates, and patients with OFG frequently have a large intake of these substances. Patients with OFG also show a tendency to have atopic conditions such as eczema and asthma.

1.24  B

Crohn’s disease has the same histological features as OFG and is present in 12% of patients with OFG.

1.25  D

Methylparaben is the preservative in local anaesthetics, and is the most common cause of an allergic reaction in patients. Occasionally sodium bisulphite is used as a preservative and this too can cause an allergic reaction. It would be highly unlikely that a patient is allergic to adrenaline as the body produces it.