



Medical History

Monday 1st June 2026


Objectives


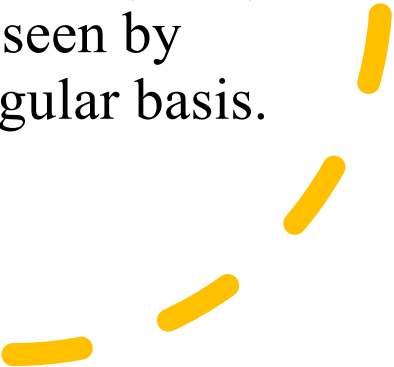
- Explain the importance of obtaining an accurate medical history
- Understand the main medical disorders that may affect the provision of orthodontic treatment


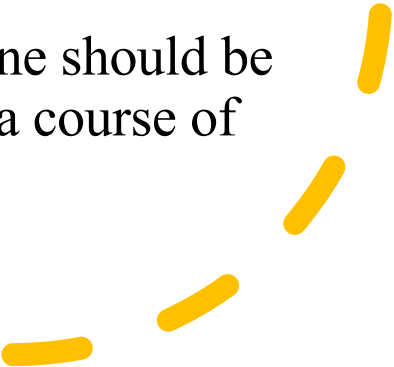


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GDC: Focus on Standards

- **Principle Four**
 - Maintain and protect patients' information
 - Their records to be up to date, complete, clear, accurate and legible
 - Their personal details to be kept confidential
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- An increasing number of patients with complicated medical conditions and drug regimes are seeking orthodontic treatment.
 - Orthodontists need to be aware of the possible clinical implications.
 - Orthodontists see their patients every 6 to 8 weeks and rapidly developing medical problems can manifest themselves at any age.
 - Orthodontists must remain vigilant as they may be the only health care professional seen by otherwise fit, young patients on a regular basis.
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- A comprehensive medical history should be taken and regularly updated.
 - Case notes should alert the clinician to the patient's medical status.
 - All medical conditions should be accurately understood before any treatment is planned and this may involve seeking guidance from the patient's physician.
 - Patients should be well informed of all the options and made aware that any orthodontic treatment has been planned with their best interests at heart.
 - The importance of excellent oral hygiene should be emphasized to all patients considering a course of orthodontics.
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What
information
is collected?

Medical conditions

Medication

Allergies

Previous GA

Last appointment with GP

Medical conditions may impact upon the provision of orthodontic treatment:

- Heart defects (with risk of endocarditis)
- Bleeding disorders
- Childhood malignancies
- Diabetes
- Immunosuppression
- Epilepsy
- Asthma
- Allergies



Infective endocarditis

- Infective endocarditis (IE) is a serious condition characterized by colonization or invasion of the heart valves or mural endocardium by a microbiological agent, following a transient entry into the bloodstream (bacteraemia).
- A number of factors can put a patient at high risk of developing an endocarditis:
 - Previous IE;
 - Acquired valvular heart disease with stenosis or regurgitation;
 - Heart valve replacement;
 - Structural congenital heart disease,
 - Hypertrophic cardiomyopathy
- NICE guidelines



NICE guidelines

- Antibiotic prophylaxis is recommended or should be considered for patients with **high risk** cardiac conditions
- Antibiotic prophylaxis is not recommended for patients with **moderate risk** cardiac conditions
- All patients at increased risk of infective endocarditis should be given advice about prevention
- Dental teams must make a shared decision with their patients about antibiotic prophylaxis for 'at-risk' dental procedures
- Dental teams should explain the potential benefits and harms of antibiotic prophylaxis so that patients can make an informed decision about whether prophylaxis is appropriate for their individual situation

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Orthodontic considerations

- Liaise with GP/Cardiologist
- Patient advice including importance of excellent OH during treatment
- Avoid bands in high-risk patients with poor OH



Bleeding disorders


- Severe bleeding disorders do not contraindicate orthodontic treatment
- Factor transfusion will be required to achieve haemostasis if dental extractions are necessary.
- Any risks of potential bleeding in the oral cavity during orthodontic treatment can be kept to a minimum by:
 - Maintaining a high standard of oral hygiene
 - Careful checking of appliances at each visit to ensure there are no wires or sharp surfaces traumatizing the soft tissues.

Bleeding disorders

- Haemophilia A - Factor VIII deficiency
- Haemophilia B or Christmas disease - Factor IX deficiency
- Von Willebrand's disease - Defects of von Willebrand's factor
- May be infected with HIV or hepatitis viruses due to transfusion of infected blood or blood products before 1985
- Regarded as being at risk of developing variant Creutzfeldt-Jakob disease (vCJD) due to transfusion of blood products in 1980–2001

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Orthodontic considerations

- Liaise with GP/hematologist
 - Ensure excellent oral hygiene
 - Non-extraction approach if possible
 - Avoid soft tissue trauma throughout treatment
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Childhood malignancy

- The commonest malignancies in childhood are the leukaemias, and amongst these, acute lymphoblastic leukaemia accounts for around 80% of cases. This condition mostly occurs in early childhood, before orthodontic treatment is routinely carried out.
- Treatment for a variety of malignancies in children often involves the use of radiotherapy, which can affect the tooth-bearing tissues. This may result in tooth agenesis and root shortening.
- Orthodontic treatment should be delayed for these patients until they are in a period of remission and if diagnosis occurs during orthodontic treatment it is usually advisable to suspend treatment and remove the appliances.

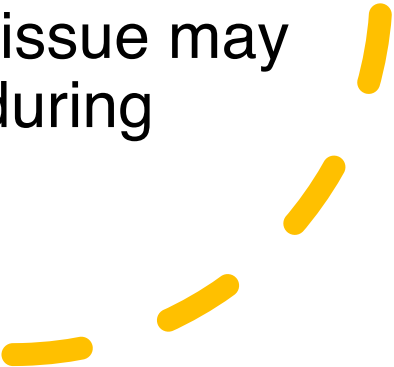
Diabetes

- Patients with insulin-dependent diabetes are more susceptible to periodontal disease.
- Excellent oral hygiene accompanied by regular periodontal maintenance is essential during orthodontic treatment.
- Early morning appointments



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Immunosuppression

- Immunosuppressant drugs such as cyclosporin, which are routinely used in transplant patients to prevent rejection of the donor organ, can cause gingival hyperplasia, which can be exacerbated by orthodontic appliances.
 - Excellent oral hygiene needs to be maintained during treatment and this can be reinforced with a chlorhexidine mouthwash.
 - Gingivectomy of hyperplastic tissue may be necessary before or even during treatment.
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Epilepsy

- Removable orthodontic appliances should be avoided in the poorly controlled epileptic as there is a potential risk to the airway from displacement during seizures.
- High impact acrylic
- These patients can also be at risk from gingival hyperplasia due to the use of certain anticonvulsant drugs.

Asthma

- The regular use of steroid-based inhalers can result in oral candida infections on the palate, which can be made worse by the use of palate-covering removable appliances.
- Patients with autoimmune and hyper-allergenic conditions can also be more prone to root resorption during orthodontic treatment.

Allergies

- A patient may present with a reported history of allergic reaction.
- Although many materials used in orthodontics are capable of inducing an allergic response, the most relevant are natural rubber latex and nickel.

Latex allergy

- Latex allergy has been reported in orthodontic practice in relation to gloves and orthodontic elastics. The most common allergic response is a type IV delayed hypersensitivity reaction triggered by the chemical accelerators used in the manufacture of latex.
- This causes a localized contact dermatitis, typically associated with a pruritic eczematous rash.
- The IgE-mediated type I reaction is less common but has more serious consequences, including anaphylaxis.

Nickel allergy

- Orthodontic wires and brackets contain nickel and nickel allergy.
- 10% of Western populations
- F>M
- It is usually a type IV allergic reaction related to the wearing of jewellery or watches and body piercing. Fortunately, oral reactions are rare, although prolonged exposure to nickel-containing oral appliances may increase sensitivity to nickel.
- Intraoral signs are nonspecific and have been reported to include erythema, soreness at the side of the tongue and severe gingivitis, despite good oral hygiene. Definitive diagnosis is usually achieved via patch testing

Questions?

