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Dental neglect in children

Abstract
Untreated dental diseases, particularly dental caries, can lead to a range of adverse impacts on children, including pain and infection. Yet caries is preventable if a child’s basic oral health needs are met. Dental neglect occurs when there is persistent failure to meet those needs. Dentists and paediatricians can work together with other health and social care professionals to identify children with dental neglect and to intervene to safeguard their oral and general health and development.

Keywords
dental caries; dental decay; dental care for children; child abuse; child neglect; child welfare; prevention
INTRODUCTION

Dental caries (or decay) is one of the commonest diseases of childhood both in the UK and worldwide. In the USA it is five times more common than asthma. Since it is both preventable and treatable and, in the UK, children have free-of-charge access to dental care, good oral health should be attainable for every child. However, the Child Dental Health Survey 2013 reported:

- 31% of 5-year-olds had obvious caries experience in primary teeth
- 46% of 15-year olds had obvious caries experience in permanent teeth.

Furthermore, dental disease was the commonest reason for a child aged 5 to 9 years to be admitted to hospital in England in 2012/13 and, by the age of 15, ten percent of children had had a general anaesthetic for dental treatment. Dental extractions cost the NHS 30 million pounds a year.

Educating parents and children in how to prevent dental disease is an essential part of any course of dental treatment. However only recently has the dental profession in the UK begun to understand fully the safeguarding implications of untreated dental disease. Rather than simply preventing and treating disease, the importance of promoting children’s general health and wellbeing is now increasingly recognised. Identifying children with dental neglect presents an opportunity to intervene early to safeguard them, including considering child protection referral to children’s social care. At the present time this remains a developing area of dental practice with a small, but growing, supporting literature.

Definition of dental neglect

Dental neglect was defined in 2009 by the British Society of Paediatric Dentistry as “the persistent failure to meet a child’s basic oral health needs, likely to result in the serious impairment of a child’s oral or general health or development”. Drawing on international perspectives, the Cardiff Child Protection Systematic Review Group’s alternative definition “refers to the failure of a parent or guardian to meet a child’s basic oral health needs, such that the child enjoys adequate function and freedom from pain and infection, where reasonable resources are available to the family or caregiver.”
To understand dental neglect requires first an understanding of dental development, dental diseases (particularly dental caries) and dental treatment provision. The aim of this article is to provide a review of current thinking on dental neglect together with sufficient background information on common oral conditions and their treatment to enable paediatricians and other health professionals to work with dental colleagues to jointly plan appropriate interventions and, when necessary, to interpret whether a child is at risk of significant harm. A glossary of common dental terms is provided in Table 1.

**DENTAL DEVELOPMENT**

**Normal development**
Development of the dentition follows a typical sequence but with some variation in the age at which teeth erupt. The primary (or deciduous) dentition is composed of 20 teeth which usually emerge between the ages of seven months and three years (Figure 1). Permanent incisors and first molars usually start to erupt at age 6, heralding the start of the mixed dentition. Parents are sometimes surprised that their six-year old children have permanent molar teeth, which will not be replaced if extracted, present alongside primary molars which will in due course be replaced by permanent successors. The permanent dentition is established once all primary teeth have exfoliated, usually around the age of 12. Third molars, or ‘wisdom teeth’, erupt in early adulthood.

**Developmental anomalies**
Teeth can be affected by inherited or acquired anomalies of number, form, structure and eruption. Examples are:
- number: missing teeth (hypodontia) or extra (supernumerary) teeth
- form: tooth size (microdont, macrodont) or shape (double teeth, invaginated teeth)
- structure: dental enamel (molar-incisor hypomineralisation, amelogenesis imperfecta), dentine (dentinogenesis imperfecta) or combinations of dental hard tissues (dilaceration following dental trauma)
- eruption: ectopic teeth, premature or delayed eruption
Dental anomalies show wide variation in severity. Some of these conditions are readily treatable, others result in tooth loss or require lengthy and complex treatment and lifelong maintenance.

**COMMON ORAL CONDITIONS AND TREATMENT**

**Dental caries**

Dental caries is a multifactorial disease of the dental hard tissues resulting from interactions over time between acidogenic bacteria (predominantly mutans streptococci) and a dietary sugar substrate, modified by many host factors including the components of saliva. It usually progresses slowly over months or years from a white spot to a brown spot, then forms a cavity in the tooth surface. If there are overwhelming risk factors, for example the frequent or night-time consumption of juice from a bottle, it may progress more rapidly. This pattern of disease in preschool children is known as severe early childhood caries (S-ECC) and affects smooth tooth surfaces not usually prone to decay (Figures 2 and 3).

Diagnosis of dental caries is by careful visual inspection under good lighting supplemented when necessary by intraoral radiographs. Early disease is asymptomatic and can remain undetected, especially in children who are unable to cooperate fully with dental examination, yet early diagnosis is important because it offers the opportunity to prevent progression or ‘arrest’ caries (Figure 3). Remineralisation can occur in a favourable environment in the presence of fluoride.

As caries progresses from enamel into dentine, symptoms of pulpititis may cause intermittent sensitivity or mild toothache. These symptoms can be reversed by restoration of the tooth. Left untreated, progression to irreversible pulpititis typically results in severe toothache which keeps children awake at night and is only partly relieved by analgesics. Necrosis of the dental pulp follows and, after a variable interval, a dental abscess may develop with further pain and the risk of spreading infection. Antibiotics and analgesia are used in emergency care but are never a permanent treatment for a dental abscess: endodontic treatment or extraction are then the only remaining definitive treatment options. If left untreated, spontaneous discharge of pus though a sinus or ‘gum boil’ may initially alleviate pain but is likely
to continue causing intermittent discomfort. Ultimately the retained roots of a severely broken down primary tooth may occasionally exfoliate spontaneously.

There is a strong association between caries experience and sociodemographic factors, with children living in lower income families having more disease: in 2013, 21% of 5-year-olds who were eligible for free school meals had severe or extensive tooth decay, compared to 11% of other children. There are also marked regional inequalities in oral health. In 12 year olds surveyed in 2008/09 the range between children living in the ‘best’ and ‘worst’ areas in England was for caries prevalence 13% to 56% and for decay severity 0.2 to 1.59 D3MFT (obvious decayed, missing, filled permanent teeth – a measure of mean lifetime caries experience).

**Treatment:**

Early carious lesions
- dietary counselling and oral hygiene advice
- fluoride varnish application, two or more times per year
- fissure sealants (see glossary)

Established cavitated lesions
- restorations or extractions, usually provided under local analgesia (Figure 3)
- often requiring multiple visits since it is rarely practical to restore more than one quadrant at a visit
- anxious children may require referral for anxiety management, including inhalation sedation
- multiple extractions in a young child may require referral to hospital for general anaesthesia (GA).

It is generally agreed that permanent teeth should be restored promptly on diagnosis but there is professional controversy regarding the best treatment for carious primary teeth. Specialists tend to advocate early intervention to prevent symptoms but it is sometimes appropriate to monitor carious teeth if they are asymptomatic and exfoliation is anticipated shortly.

Extraction of permanent teeth does not invariably have a long-term adverse effect on the dentition. Many children have crowded teeth and can lose a permanent tooth in each quadrant, particularly if extractions are optimally timed, without long term adverse impact. Additional non-diseased teeth are sometimes extracted in crowded mouths to maximise spontaneous alignment.
Periodontal and oral soft tissue diseases
Plaque-induced gingivitis is common in children but is reversed by effective oral hygiene. Chronic periodontitis tends to start during adolescence in susceptible young people with early attachment loss detectable in 37% of 16-year-olds. Signs include poor oral hygiene, calculus, swollen red bleeding gums and halitosis but are often not noticed by the child or parent. The usual course of these diseases is slow, painless progression over decades with the risk of tooth loss only occurring in later life. In contrast, aggressive forms of periodontitis only affect 0.1-2.6% of children.

Painful oral soft tissue conditions include ulcers, commonly due to minor soft trauma or recurrent aphthous stomatitis. Children may also present with a wide range of oral soft tissue manifestations of systemic disease, infections and drug-reactions.

Treatment:
Prevention of gingivitis and periodontitis is by regular effective oral hygiene. Children need help with toothbrushing until they are at least 7 years old. Treatment for periodontitis involves scaling to remove calculus deposits, motivation in self-care and regular monitoring. Painful oral mucosal conditions can be managed with ‘over the counter’ topical analgesic sprays or gels but some conditions require referral for specialist investigation and treatment.

Dental trauma
Traumatic dental injuries are common, affecting 25% of school children. Types of injury fall into two groups: fractures and luxation injuries. Some injuries, particularly minor injuries to the primary dentition, may go unnoticed at the time and only be diagnosed when the child presents with late complications, such as a discoloured tooth.

Treatment:
Treatment is dependent on the type and severity of injury, varying from simple reassurance and review to complex multi-visit treatment. Specialist care may be required, particularly for combinations of injury type or multiple tooth involvement. Outcomes may be adversely affected by delay seeking treatment.
Malocclusion
A malocclusion is a deviation from the normal arrangement or position of the teeth, jaws and face. Surveys indicate that a third of 12-year-old children have malocclusions that would ‘benefit greatly’ from treatment. These include severe crowding, prominent teeth and missing teeth. Malocclusion can be a focus for teasing and may have an adverse impact on self-esteem and social interaction.

Treatment:
Orthodontic appliance therapy, or treatment with ‘braces,’ aims to improve appearance and function and can also improve emotional and social wellbeing. However it demands a commitment to frequent appointments, usually over a period of 2 years. Most children require considerable parental support and encouragement to attend appointments and to maintain the exemplary standard of oral hygiene required to avoid concomitant damage to oral health when wearing an appliance. Children who move house frequently, such as homeless or looked after children, face particular difficulties accessing orthodontic services.

DENTAL CARE PROVISION

Dental care providers
In the UK, routine dental care for children is:
• mainly provided by NHS general dental practitioners, with 70% of the child population receiving dental care in any two year period
• available free-of-charge (but a small minority of families choose to attend private practitioners)
• available to those without their own dentist from NHS access and out-of-hours services, or from community or salaried services (local arrangements may vary)
• provided by a dentist-led team which may include dental therapists, hygienists and oral health educators
Specialist dental care is:
• estimated to be needed by 1% of the child population in any one year
• available on referral to hospital-based or community-based paediatric dental specialists and consultants; where local referral pathways are undeveloped, local
specialist paediatric dentists can be identified using the General Dental Council’s online specialist register

Recommended dental attendance
It is recommended that all children should see a dentist by the age of one. The recommended interval between dental ‘check-ups’, or oral health reviews, is determined specifically for each child, decided by assessing risk of future dental disease. Three-monthly recall is advocated for those at highest risk of oral disease, those whose general health may be at risk if they develop dental disease, such as children with complex medical conditions or disabilities, and those who find it difficult to accept dental treatment due to anxiety or behavioural disorders. Six-monthly recall is advised for most children, extended to 12-months for those at lowest risk.

DENTAL NEGLECT

Children’s oral health needs
For optimal oral health, children have a number of basic oral health needs (Table 2). Poor oral health may indicate that these needs have been neglected. Paediatric dentists perceive dental neglect to be a common problem and 60% report seeing children with neglected dentitions once daily or more often.

Impact of untreated dental disease
Untreated dental disease can lead to pain, infection and loss of function. This can adversely affect learning, communication, nutrition and other activities necessary for normal growth and development. Repeated symptoms from a single carious tooth can cause as great an impact on the child as problems related to multiple diseased teeth.

Severe untreated dental disease can cause:
• toothache
• disturbed sleep
• difficulty eating or change in food preferences
• lower body-weight, growth and quality of life
• absence from school and interference with play and socialisation
and may put a child at risk of:
• being teased because of poor dental appearance
• needing repeated antibiotics
• chronic localised infection which may affect underlying developing teeth
• severe acute infection which can cause life-threatening systemic illness
• repeated general anaesthesia for tooth extraction

Diagnosis

History
Assessment for dental neglect requires a comprehensive history, including:
• current and previous symptoms, including duration, frequency and severity
• parental awareness of dental disease
• previous dental attendance
• any difficulty accessing dental care
• medical history, with specific reference to conditions affecting dental care
• learning, behaviour or communication difficulties or dental anxiety affecting
dental treatment provision
• the child or young person’s views
• other health and social care professionals involved with the family
• other markers of vulnerability

Examination
Clinical examination of the mouth and its associated hard and soft tissues is carried
out by a dentist using good lighting, sharp eyes and a blunt probe. The findings are
recorded on a dental chart and mouth map, supplemented as necessary by written
description.

Investigations
Good quality intra-oral radiographs increase the accuracy of caries diagnosis when the
child’s cooperation permits. Panoramic tomography is used to assess dental
development when the exposure can be justified. Other investigations such as saliva
flow rate and buffering capacity or oral microbiological tests are occasionally requested. The use of a Dental Neglect Scale is described in epidemiological research but has not been widely adopted for individual assessment.

Features of concern
While dental research has led to a well-developed understanding of the aetiology, pathogenesis, epidemiology and evidence-based treatment of dental diseases it has proved difficult to establish clear diagnostic criteria for dental neglect. However there is consensus on features of particular concern (see Table 3), based on expert opinion confirmed by recent systematic review findings. Furthermore, NICE guidance advises when health professionals should ‘consider’ child maltreatment and when they should ‘suspect’ it (Table 4).

Differential diagnosis

Dental fear and anxiety
• where dental attendance has been avoided
• where dental care has been sought but the child has not been offered appropriate anxiety management (behavioural, conscious sedation or general anaesthesia)

Conditions that cause unexpectedly severe dental caries
• dry mouth (Figure 4), for example due to congenital aplasia of salivary glands, radiotherapy, infection, drug-induced (Figure 5), malnutrition, syndrome-associated
• children taking frequent sugary medication or dietary supplements where there is no sugar-free alternative
• children who require very frequent meals for essential management of a medical condition, for example some rare inherited metabolic disorders

Conditions that cause severe problems with oral cleanliness, plaque and calculus accumulation
• gastrostomy-fed children, particularly those at risk of aspirating
• orally defensive children who strongly resist toothbrushing, for example some children with autism
Vulnerable children
Some groups of children may be particularly vulnerable to dental neglect remaining undetected:

- pre-school children with limited contacts outside the home
- children whose lifestyles make access to regular dental care difficult, for example homeless families, travellers, asylum seekers, children whose parents have mental health or alcohol/substance abuse problems (Figure 5)
- children with disabilities are known to face additional barriers to obtaining dental care
- looked after children may have a range of unmet health needs, including dental healthcare needs.

Children with certain medical problems, such as congenital heart disease or immunodeficiencies, may be more likely to experience ‘serious impairment of health or development’ as a result of coexistent untreated dental disease.

Management of dental neglect

The doctor’s role
Doctors should routinely look at the mouth and teeth when examining a child, particularly when there are wider child protection concerns or during a child protection medical. When dental neglect is suspected, concerns should be raised with the parents or carers. The health benefits of seeking dental care should be stressed and advice given to:

- make an appointment with the child’s general practice dentist, if they have one
- telephone the local NHS dental helpline to enquire which practices are accepting new patients, if they have no dentist

Referral by letter is preferable, especially if the child has pain or signs of infection, and details of any relevant medical history should be included. If there are other complexities or increased vulnerability the child may be eligible for hospital or
community-based specialist or consultant-led paediatric dental care. Options may vary according to local circumstances and established care pathways.

If the dental signs are severe or accompanied by signs of general neglect the doctor must, alongside making the dental referral, follow usual child protection procedures for neglect.

The dentist’s role

Three stages of intervention are advocated, implemented according to the level of concern:

Stage 1. Preventive dental team management
Stage 2. Preventive multi-agency management
Stage 3. Child protection referral

Preventive dental team management

This involves raising concerns with parents, offering support to meet the child’s oral health needs, setting targets, keeping records and monitoring progress.

Comprehensive dental treatment is arranged with an initial focus on relief of pain and provision of preventive care. In order to overcome problems of poor attendance, dental treatment planning must be realistic, achievable and negotiated with the family. If concerns remain, management should progress to the next stage.

Preventive multi-agency management

The dentist then liaises with other professionals, such as the health visitor or school nurse, general medical practitioner or social worker, in order to share information, to ask if concerns are shared and to clarify what further steps are needed. It should be checked whether the child is subject to a child protection plan. A joint plan of action should be agreed and documented, with a date specified for review.

Child protection referral

If the situation is found to be too complex or deteriorating, and there is concern that the child is suffering significant harm, a child protection referral should be made according to local procedures.

It must be emphasised that child protection referral should not be delayed when there are clear signs of general neglect at the outset. However when there is a lower level of concern, and signs of apparently isolated dental neglect, the tiered
The response described above is appropriate. Dentists do not usually make a diagnosis of dental neglect until families have had the opportunity to respond to the offer of accessible dental care. The past decade has seen an increase in professional confidence in referring concerns about child maltreatment but for many dental professionals this is a new area of practice in which they need advice and support from experienced child protection professionals.

Whilst health professionals’ opinion supports considering untreated dental caries in itself as a marker of possible general neglect, meriting prompt early intervention to safeguard children, an unequivocal evidence-base is lacking. Studies reporting dramatically increased caries experience in maltreated children are prone to selection bias but new evidence has confirmed moderately increased caries experience and more untreated disease, particularly in the primary dentition.

**Follow-up**
All children with dental neglect, whatever its severity, should receive regular dental follow-up and preventive care. This is often a challenge to achieve in practice because missed appointments are frequently a feature of the problem. Hospital and community-based audits of attendance report 12-32% of children’s dental appointments missed. Even after dental extractions under GA, as few as 13% of children attend for follow-up dental care despite its importance being routinely stressed.

**Working together**
There is great potential for improvements in working together between the dental, medical and nursing professions to safeguard vulnerable children with dental neglect. This will require all parties to communicate better with each other. Examples of recently reported initiatives are:
- paediatric liaison nurses to support information sharing
- projects to routinely include dental examination in child protection medical assessments
**Practice points**

- dental caries is a very common but preventable disease
- neglect of a child’s oral health needs is often a factor in severe untreated dental caries
- diagnosis of dental caries and dental neglect requires examination by a dentist
- management of dental neglect requires health and social care professionals to work together effectively

**What’s new**

This update draws on a growing evidence-base and reports increasing professional confidence in diagnosing dental neglect. Further development of communication pathways between doctors, dentists and other healthcare professionals is required to reduce the burden of oral disease in childhood and to ensure children’s oral health needs are met.

**Conflict of interest statement**

The authors confirm no conflict of interest affects the content of this article.
Further reading


Table 1.  Glossary of common dental terms

<table>
<thead>
<tr>
<th>Development</th>
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<tbody>
<tr>
<td>eruption</td>
<td>emergence of a new tooth through the gingiva (gum)</td>
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<tr>
<td>exfoliation</td>
<td>spontaneous loss of a tooth, usually when a primary (baby)</td>
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<td></td>
<td>tooth is replaced by its permanent (adult) successor</td>
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<tr>
<td>quadrant</td>
<td>the teeth in one half of a dental arch e.g. the upper right</td>
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<tr>
<td></td>
<td>quadrant extends from the midline to the most distal upper</td>
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<tr>
<td></td>
<td>right molar</td>
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<tr>
<td>dental tissues</td>
<td>enamel, dentine, pulp, cementum, gingiva, periodontal ligament</td>
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<table>
<thead>
<tr>
<th>Diagnoses</th>
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<tbody>
<tr>
<td>dental caries</td>
<td>destruction (decay) of dental hard tissues by acidic by-</td>
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<tr>
<td></td>
<td>products from bacterial fermentation of dietary carbohydrates</td>
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<tr>
<td>dental plaque</td>
<td>bacterial biofilm on the tooth surface, removed by</td>
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<tr>
<td></td>
<td>toothbrushing</td>
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<tr>
<td>gingivitis</td>
<td>inflammation of the gingival margin, usually plaque-related</td>
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<tr>
<td></td>
<td>due to poor oral hygiene</td>
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<tr>
<td>periodontitis</td>
<td>progressive destruction of the supporting tissues of the tooth</td>
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<td></td>
<td>(‘gum disease’); rare before puberty</td>
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<tr>
<td>calculus</td>
<td>hard deposit of mineralised plaque; gross deposits are</td>
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<td></td>
<td>uncommon except in children with complex disabilities,</td>
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<tr>
<td></td>
<td>especially if non-orally-fed</td>
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<tr>
<td>pulpititis</td>
<td>painful inflammation of the dental pulp (nerve); acute or</td>
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<tr>
<td></td>
<td>chronic; can progress to dental abscess</td>
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<tr>
<td>Term</td>
<td>Description</td>
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<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>dental abscess</td>
<td>abscess in the periapical tissues (at the root apex); acute with severe pain and risk of spreading infection or chronic discharging sinus with intermittent discomfort</td>
</tr>
<tr>
<td>dental trauma</td>
<td>injuries to teeth: (a) fractures - defined by the tissues affected e.g. enamel, dentine, pulp and (b) luxation injuries - defined by the degree of loosening and the direction of movement</td>
</tr>
<tr>
<td>tooth surface loss</td>
<td>toothwear due to erosion (e.g. from acidic drinks or gastric reflux), attrition (e.g. from tooth grinding) or abrasion (e.g. from abrasive foodstuffs), alone or in combination</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
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<tr>
<td>preventive care</td>
<td>use of fluorides (e.g. as toothpaste or varnish), fissure sealants, oral hygiene instruction and dietary counselling</td>
</tr>
<tr>
<td>fissure sealants</td>
<td>resin coating applied to molar teeth to prevent caries</td>
</tr>
<tr>
<td>scaling</td>
<td>calculus removal by scraping it off with a metal or ultrasonic tipped instrument</td>
</tr>
<tr>
<td>restoration</td>
<td>removal of decayed or damaged tooth tissue and repair with a suitable material (a filling) or custom-made replacement (e.g. crown, inlay, veneer)</td>
</tr>
<tr>
<td>endodontic treatment</td>
<td>treatment for the diseased or injured dental pulp (‘root filling’)</td>
</tr>
<tr>
<td>extraction</td>
<td>irreversible removal of the tooth</td>
</tr>
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</table>
Table 2  Children’s basic oral health needs

<table>
<thead>
<tr>
<th>To maintain optimal oral health, children need:</th>
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<tbody>
<tr>
<td>• fluoride – a regular source, usually supplied by twice daily use of fluoride toothpaste</td>
</tr>
<tr>
<td>• diet – limited frequency and amount of sugary snacks and drinks; drinks given from a free-flowing cup instead of a feeding bottle from the age of 1</td>
</tr>
<tr>
<td>• oral hygiene – facilities, supervision and assistance with toothbrushing last thing at night and at one other time</td>
</tr>
<tr>
<td>• dentist visits – to benefit from preventive care and dental treatment when needed</td>
</tr>
</tbody>
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Table 3.  Dental neglect: features of particular concern

<p>| | |</p>
<table>
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<tbody>
<tr>
<td><strong>1. OBVIOUS DENTAL DISEASE</strong></td>
<td></td>
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<tr>
<td>Severe untreated dental disease, particularly that which is obvious to a layperson or non-dental health professional</td>
<td></td>
</tr>
<tr>
<td><strong>2. SIGNIFICANT IMPACT ON THE CHILD</strong></td>
<td></td>
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<tr>
<td>Evidence that dental disease has resulted in a significant impact on the child</td>
<td></td>
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<tr>
<td><strong>3. FAILURE TO OBTAIN DENTAL CARE</strong></td>
<td></td>
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<tr>
<td>Parents or carers have access to but persistently fail to obtain treatment for the child, for example:</td>
<td></td>
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<tr>
<td>- failure to seek dental care</td>
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<tr>
<td>- irregular attendance and repeated missed appointments</td>
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<tr>
<td>- failure to complete planned dental treatment</td>
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<tr>
<td>- returning in pain at repeated intervals</td>
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<tr>
<td>- requiring repeated general anaesthesia for dental extractions</td>
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</tbody>
</table>
Table 4  Alerting features of neglect of relevance to dental disease (summarised from NICE clinical guideline 89, Child maltreatment: when to suspect maltreatment in under 18s, 2009 [http://guidance.nice.org.uk/CG89] with case examples

<table>
<thead>
<tr>
<th>(a) features that should prompt you to CONSIDER neglect</th>
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<tbody>
<tr>
<td>Parents or carers who do not administer essential prescribed treatment</td>
<td>e.g. antibiotics not administered to a child with facial cellulitis secondary to a dental abscess</td>
</tr>
<tr>
<td>Parents or carers who have access to but persistently fail to obtain National Health Service (NHS) treatment for their child’s tooth decay</td>
<td>e.g. obvious decayed teeth in a child who lives 100 yards from an NHS dental practice which is accepting new NHS patients</td>
</tr>
<tr>
<td>Repeated failure to attend follow-up appointments essential for the child’s health and wellbeing</td>
<td>e.g repeated failure to attend for restoration of a fractured permanent incisor where the child reports distress about their poor dental appearance</td>
</tr>
<tr>
<td>Persistent failure to engage with relevant child health programmes</td>
<td>e.g. not consenting to a priority dental screening programme in a special school for children with severe learning difficulties</td>
</tr>
<tr>
<td>Injury, if the explanation suggests lack of appropriate supervision</td>
<td>e.g. avulsed teeth in a 3-year-old while left in the care of a 7-year-old sibling</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(b) features that should prompt you to SUSPECT neglect</th>
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<tbody>
<tr>
<td>Medical advice not sought, compromising the health and wellbeing of the child, including if they are in ongoing pain</td>
<td>e.g. nursery staff report child frequently absent or sent home due to toothache, also a poor eater and looks unwell</td>
</tr>
</tbody>
</table>
Figure captions

Figure 1. Five-year-old boy with a healthy primary dentition.

Figure 2. Four-year-old girl with severe untreated dental caries who has missed appointments for a dental clearance (extraction of all her teeth) under GA. (© Oxford University Press. Reproduced with permission from Harris J, Welbury R. In: Paediatric Dentistry, 4th edn. Edited by Welbury, Duggal & Hosey, 2012)

Figure 3. Four-year-old boy on completion of treatment for S-ECC associated with prolonged night-time bottle feeding. The primary upper incisors were extracted and the molars restored with preformed metal crowns. There has been a good response to oral hygiene instruction and dietary advice such that multiple white (1) and brown (2) spot carious lesions have now arrested. This child has high past caries experience but no active caries and there are no concerns about dental neglect.

Figure 4. Dental caries and tooth surface loss affecting smooth surfaces of incisor teeth (surfaces usually resistant to decay). This was initially misdiagnosed as dental neglect but further investigation revealed severe dry mouth (stimulated saliva flow rate 0.16 ml/min).

Figure 5. Suspected dental neglect in a 14-year-old boy with ADHD who presented with occasional toothache from tooth 15 (arrowed). He has poor oral hygiene, drug-induced dry mouth, gingivitis and caries in sixteen permanent teeth (16, 15, 13, 12, 11, 21, 22, 23, 25, 27, 37, 36, 35, 45, 46, 47). He has never previously visited the dentist. His mother has mental health problems and, until recently, he lived in the care of his aunt. He will initially receive preventive dental team management followed by review and further action as necessary.