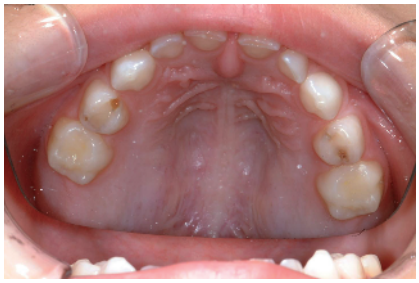
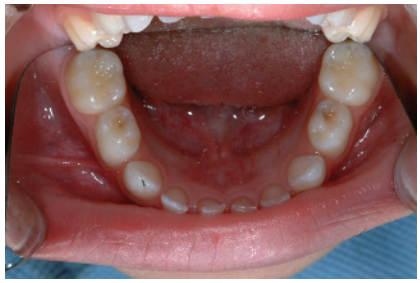
1 Planning treatment for children

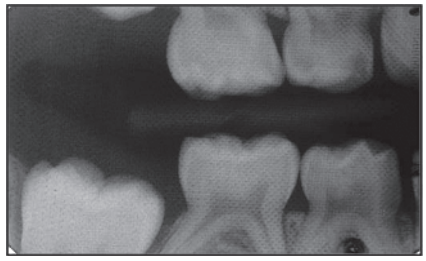


(a)



(b)

Figure 1.1 Intra-oral view showing the carious upper (a) and lower (b) primary molars.



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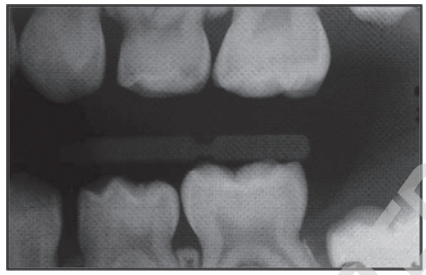
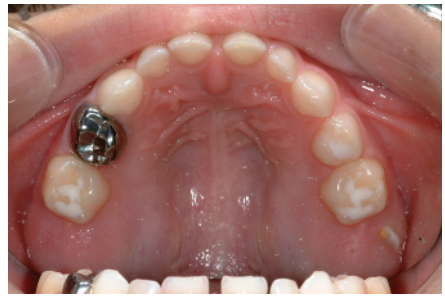
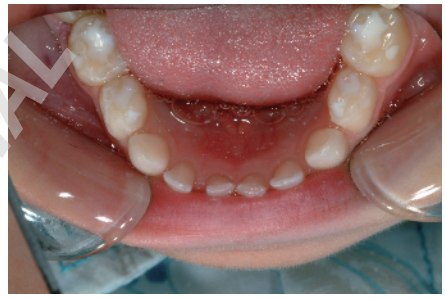


(b)

Figure 1.2 Bitewing radiographs showing extent of caries.

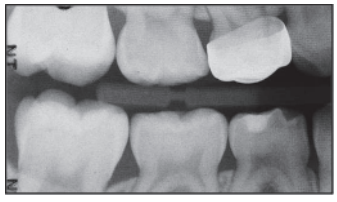


(a)

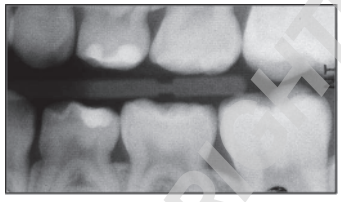


(b)

Figure 1.3 Intra-oral view showing upper (a) and lower (b) arches at the end of treatment.

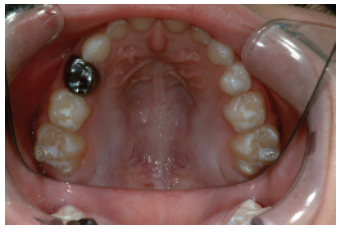


(a)

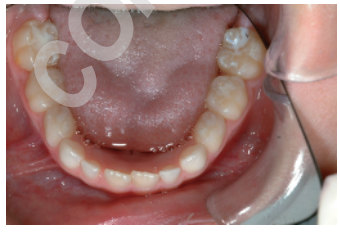


(b)

Figure 1.4 Postoperative radiographs of the treated case.



(a)



(b)

Figure 1.5 Follow-up visit revealed that first permanent molars had erupted and these were fissure sealed.

Table 1.1 Step-by-step plan of the proposed treatment where prevention is carried out alongside restorative care.

Visit	Treatment	Preventative
One	Examination and treatment plan Correspondence with paediatrician	Oral hygiene instructions Use of adult tooth paste Diet sheet was given
Two	Full mouth prophylaxis **55** – Fissure sealant **65** – Fissure sealant **75** – Fissure sealant **85** – Fissure sealant Temporisation of 54 and 64	Reinforce oral hygiene instructions Collect diet sheet Duraphat™ (22 600 ppm F) Plaque score
Three	**64** – Composite restoration	Reinforce oral hygiene measures Diet counselling Duraphat™ (22 600 ppm F)
Four	**54** – Stainless steel crown	Reinforce diet advice Plaque score Duraphat™ (22 600 ppm F)
Five	**74** – Composite restoration	Reinforce oral hygiene measures

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General philosophy of the authors

Dentists who treat children are in a unique position not only to provide dental treatment when required, but to influence the future behaviour, attitudes to oral health and attitude towards dentistry in general. Children deserve the highest quality care and highest quality restorative dentistry should be provided to them, supplemented with rigorous prevention. Prevention of dental caries in children should be a priority but sadly nearly half of 5-year-olds, even in developed countries, still develop dental caries. A non-interventionist approach, as has been advocated in some countries such as the UK, or poor restorative patchwork dentistry, is doomed to failure and only leads to pain, infection and suffering in children, requiring more invasive interventions. These are traumatic and expensive and negatively influence the child's future behaviour and attitudes to dentistry. Good restorative and preventive care obviates the need for extraction of primary teeth under general anaesthesia, a practice which should have only a small place in the dental care of young children. In addition, in a developing child, the dentist has the task of monitoring the dentition, diagnosis and management of anomalies as well as having a knowledge of medical conditions and the provision of safe restorative care for children.

Philosophy of treatment planning

- Gain the trust and cooperation of the child.
- Make an accurate diagnosis and devise a treatment plan appropriate to the child's need.
- Comprehensive preventive care.
- Deliver care in a manner the child finds acceptable.
- Use materials and techniques which provide effective and long-lasting results.

History

This should include medical history, social history, history of the present complaint and the past dental history. What were the "likes" and "dislikes" of the child at previous dental visits? In addition, parents' assessment of the previous and expected child's behaviour is useful.

Examination

- A good examination using tell–show–do, including charting for teeth present and caries, including areas of early decalcification.
- Any missing teeth.
- Gingival health.
- Developmental defects.
- Tooth surface loss.
- Initial occlusal assessment.

Radiographs and other investigations

Appropriate radiographs such as bitewings or OPG (Chapter 10) or any other special tests such as pulp sensibility tests.

Diagnosis

In children the diagnosis needs to encompass two aspects:

- diagnosis of the dental/oral condition;
- the child's behaviour and the behavioural approach likely to succeed in provision of the treatment.

Diagnosis should be specific. For example, a diagnosis "dental caries" in itself is incomplete as it does not specify the reason the child has dental caries. The root cause of the problem cannot be addressed unless a specific diagnosis is made.

Formulating treatment plan

An example of a treated case and the step-by-step treatment plan is shown is Figs. 1.1–1.5 and Table 1.1 respectively. When managing caries in children this should relate to:

- prognosis of the affected teeth;
- child's behaviour and likely acceptance of the treatment.

Restore or extract

- Extent of caries. Are the teeth restorable?
- Impact that either option will have not only on developing dentition but child's long-term well-being.
- When all primary molars are involved, give consideration to restoring the second and extraction of the first primary molars.

Each treatment plan should be tailor-made for the child. For some children, comprehensive restorative care using one of the behavioural approaches is appropriate. For others extraction of some primary teeth and restoration of the others with local analgesia (LA) or general anaesthesia (GA) is more appropriate.

Management strategy – LA, LA with sedation or GA?

Most children are amenable to behaviour guidance. However, when planning treatment, the child's well-being, and also the impact that multiple visits of invasive treatment under local analgesia might have on the child's future behaviour and attitude towards dental treatment should be considered. Access to good GA facilities is essential.

Preventive strategy

Depending on the caries risk, a preventive strategy is devised.

Choice of materials

This depends on tooth to be restored, past caries history and cooperation of the child. An important consideration in children is that the tooth should only need restoring once. In very young children where a restoration is required to last 4–5 years, due consideration should be given to the use of stainless steel crowns.

Developmental anomalies

Formulate a short-, medium- and long-term plan.

Medical history and treatment planning

- Liaise with medical practitioner.
- Understand the impact of the medical condition on the provision of treatment.

In the following chapters all the aspects that play a role in the management of children's oral and dental health are discussed.