



BioClear & Biomimetic Dentistry

A tooth-preserving way to restore damaged teeth

For many years, the usual answer to a badly damaged tooth was to shape it down and cover it with a crown. That can still be the right choice, but it is not always the first step. We start every assessment with one question: **what is the least invasive treatment that will properly protect this tooth?**



What does BioClear mean?

BioClear is a practical way of rebuilding a tooth. Tooth-shaped matrices recreate the missing walls and contacts, and a controlled injection-moulding technique places tooth-coloured resin so it closely adapts to the tooth.

What does biomimetic mean?

Biomimetic means “designed to copy nature”. It is a philosophy, not one product: preserve healthy enamel and dentine, bond carefully, and rebuild the tooth so it can work as one unit.

Put simply, BioClear guides **how** we shape and rebuild the tooth, and biomimetic dentistry guides **why and where** we bond. They work together.

— YOUR OPTIONS, FROM LEAST TO MOST INVASIVE

- 1 Traditional filling.** Repairs a small or moderate cavity when the surrounding tooth is strong. Often exactly the right treatment.
- 2 BioClear restoration.** A one-visit bonded rebuild for larger damage or a heavily filled tooth. Where needed, it extends around weakened walls or cusps, a little like shrink-wrapping the tooth.
- 3 Biomimetic crown.** Made outside the mouth and bonded to the tooth when there is not enough reliable foundation for a direct rebuild, while keeping as much healthy tooth as it safely can.
- 4 Conventional crown or other treatment.** Still the safest choice for some teeth, and we will tell you honestly when that is the case.

PRESERVE FIRST. PROTECT PROPERLY.

Conservative dentistry means doing no more than your tooth needs, and no less than it requires to be properly protected. We will show you what we can see and explain why we are recommending a particular option.

— YOUR APPOINTMENT, STEP BY STEP

- 1 Understand the whole tooth.** We look at the tooth, any existing fillings, cracks, x-rays if needed and your bite, then explain what we can see.
- 2 Keep you comfortable.** We numb the area carefully and check you are comfortable before we begin.
- 3 A clean, dry working area.** A rubber dam may be placed around the tooth. Think of it as a little raincoat that keeps saliva away from the bonding surface.
- 4 Prepare conservatively.** We remove decay, failing material and unsupported tooth while preserving healthy enamel and dentine, and smooth sharp internal corners where appropriate.
- 5 Bond and rebuild.** Careful bonding seals the tooth. In selected deep cavities we may seal the freshly prepared dentine straight away and add a fibre-reinforced inner core to help resist cracks. Matrices and injection moulding then rebuild the shape.
- 6 Check, refine and review.** We shape and polish the restoration, check your bite carefully and review how the tooth settles at your regular visits.

— AFTER YOUR VISIT

- Your lip, cheek or tongue may stay numb for a few hours. Take care not to bite them.
- The tooth may feel different at first, and mild short-term sensitivity can occur after a deep restoration.
- If the tooth feels high when you bite, let us know. A small adjustment is often all it needs.
- Call us promptly if pain is increasing, wakes you, lingers strongly, comes with swelling, or something simply does not feel right.

— COMMON QUESTIONS

Can this help me avoid a crown?

Sometimes. A BioClear restoration may give a suitable tooth enough support. Other teeth need a biomimetic crown, and some still need a conventional crown. It depends on the tooth.

Can it prevent a root canal?

No treatment can promise that. Preserving and sealing the tooth aims to protect it, but a tooth with irreversible nerve damage may still need root canal treatment.

How long will it last?

It varies with the tooth, the size of the restoration, your bite, grinding, diet and home care. Bonded resin can often be maintained or repaired, which keeps future options open.

What will it cost?

It depends on what your tooth needs. Keeping more of your own tooth often means a similar fee, and sometimes less. We explain your options and the fee before any treatment.

YOUR PART AND OUR PART

You look after the tooth at home and keep up your regular check-ups and cleans. We monitor it, check your bite and act early if anything changes. Together, that gives your tooth its best chance of lasting well into the future, and helps you keep your natural teeth for life wherever possible.

General information only. This guide does not replace an examination or personalised advice. Recommendations vary with the condition of each tooth, your symptoms, oral health and bite. No restoration can guarantee that a cracked or heavily damaged tooth will never need further treatment.