

Dental Bridges

Canonical: <https://directory.collinsstreetspecialistcentre.com.au/procedures/dental-bridges/>

Description:

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Details:

Collins Street Specialist Centre Dental Bridges

What is a dental bridge?

At Collins Street Specialist Centre, dental bridges sit at the heart of specialist prosthodontic care — a fixed, permanent answer for patients living with one or more missing teeth. A dental bridge is a fixed prosthetic restoration that replaces absent teeth by anchoring to the natural teeth or implants on either side of the gap. Unlike a removable denture, a bridge is permanently cemented into position. It cannot be taken out, and it functions as an integrated part of the dental arch.

The name is straightforwardly descriptive: the restoration literally bridges the space left by a missing tooth. The artificial tooth (or teeth) suspended within that gap is called a pontic; the anchor restorations on either side are called retainers or abutment crowns. Together, they form a single rigid unit that restores biting force, stops adjacent teeth from drifting into the space, and recreates the appearance of a complete smile.

Bridges have been a foundational approach in restorative dentistry for many decades. Modern materials and digital fabrication have transformed what was once a relatively approximate process into a highly precise clinical discipline — all-ceramic and zirconia bridges can now match natural teeth in both colour and translucency with remarkable fidelity.

Types of dental bridges

****Traditional fixed bridge**** The most widely used design. Two or more natural teeth adjacent to the gap serve as abutments; each receives a crown, and the pontic spans between them. This is the right option when adjacent teeth already require crowning, when they have been previously restored, or when bone volume does not support implant placement.

****Cantilever bridge**** Supported by a single abutment tooth on one side only. Used when there is just one suitable natural tooth adjacent to the space — typically in lower-stress areas of the mouth. Less commonly indicated than bilateral designs, given the mechanical disadvantage of the cantilevered configuration.

****Maryland (resin-bonded) bridge**** A minimally invasive design in which metal or ceramic wings are bonded to the inner surfaces of adjacent teeth, without full crown preparation. The natural teeth remain largely untouched. This is a strong option for replacing a single front tooth — particularly in younger patients where preserving tooth structure is a clinical priority. Maryland bridges are less suited to high-load posterior positions where occlusal forces are greater.

****Implant-supported bridge**** Rather than relying on natural teeth as anchors, the retainers are supported by dental implants surgically placed in the jaw. This eliminates the need to prepare adjacent

healthy teeth and provides the most biomechanically sound long-term solution. Implant-supported bridges are particularly valuable when replacing multiple consecutive missing teeth across a longer span.

At Collins Street Specialist Centre, implant placement for bridge support is carried out by the specialist periodontists or oral and maxillofacial surgeons. The prosthodontist designs, plans, and places the final bridge restoration — with close coordination across disciplines throughout.

When might you need a dental bridge?

A bridge may be the most appropriate clinical solution when:

- **One or more teeth are missing** — whether from extraction, trauma, or congenital absence -
- Adjacent teeth require crowning** — making a traditional bridge a logical choice, since the anchor teeth will be prepared regardless -
- Bone volume is insufficient for implants** — or where implant placement is contraindicated for medical or anatomical reasons -
- A timely solution is needed** — bridges can typically be completed in fewer appointments than implants, which require a healing period following surgery -
- A Maryland bridge is preferred** — for younger patients, or where preserving the structure of adjacent teeth is paramount -
- Multiple consecutive teeth are missing** — an implant-supported bridge can span a longer edentulous section without requiring an individual implant for every absent tooth

Your specialist prosthodontist at Collins Street Specialist Centre will discuss all viable treatment options — including dental implants — before any irreversible preparation of natural teeth is undertaken. The goal is always a decision that serves the patient's long-term oral health, not simply the most convenient near-term solution.

What to expect: step by step

Initial assessment

A comprehensive assessment includes clinical examination, intraoral photography, and digital radiographs. Where implant-supported options are under consideration, cone beam CT (CBCT) imaging may be arranged through the imaging centre at Level 9 of the Manchester Unity Building, allowing precise assessment of bone volume and anatomy.

The prosthodontist maps out the bridge design in detail — number of units, material selection, and whether any adjunctive treatment is required before fabrication begins. Depending on the clinical picture, this may include gum recontouring, root canal therapy on an abutment tooth, or implant surgery.

Preparation and impressions

For traditional and cantilever bridges, abutment teeth are shaped under local anaesthetic to accommodate the retainer crowns. A digital impression is taken using the 3Shape TRIOS 3 intraoral scanner, capturing the prepared teeth, adjacent teeth, and bite registration in three dimensions. Temporary crowns and a temporary pontic are placed to protect the prepared teeth and maintain aesthetics during the fabrication period.

The digital data goes to the in-house dental laboratory, which works exclusively for Collins Street Specialist Centre patients. Technicians design the full bridge unit using Exocad DentalCAD software, in close communication with the prosthodontist throughout.

For Maryland bridges, only minimal preparation of the bonding surfaces is required — no full crown preparation, preserving the integrity of the adjacent teeth.

Fitting and cementation

At the fitting appointment, the bridge is carefully tried in before cementation. The prosthodontist evaluates the fit at each margin, the contact between the pontic and gum tissue, the bite across all excursive movements, and the aesthetic result. Any adjustments are made before proceeding. Once all criteria are satisfied, the bridge is permanently cemented into position.

Recovery and aftercare

Dental bridges require a different approach to daily cleaning than natural teeth, because floss cannot pass beneath the pontic in the conventional way. Getting the right cleaning routine established from the start is essential to the long-term success of the restoration.

****Daily cleaning:**** - ****Interdental brushes**** — slim brushes designed to pass beneath the pontic and clean the tissue-facing surface - ****Floss threaders or water flossers**** — to access below the pontic from the gum side - ****Twice-daily brushing**** — with particular attention to the margins where the retainer crowns meet the gum line

Inadequate cleaning below the pontic leads to gum inflammation, progressive bone loss, and ultimately failure of the abutment teeth. These are largely preventable outcomes with the right technique and consistent daily care.

****Functional care:**** - Avoid habits such as ice-chewing, nail-biting, or using teeth as tools - Where bruxism (teeth grinding) is present, a protective occlusal splint will typically be recommended to reduce mechanical load on the bridge - Regular specialist review allows the bridge, abutment teeth, and supporting bone to be monitored over time

A well-maintained bridge typically lasts 10–15 years or more. Implant-supported bridges, when cared for appropriately, often last considerably longer.

Why see a specialist prosthodontist at Collins Street Specialist Centre?

Replacing a missing tooth with a bridge involves decisions that cannot be reversed: abutment teeth are permanently shaped, and the pontic design determines long-term gum health at that site. Errors in bridge design — incorrect margins, a pontic that presses on the gum tissue rather than resting passively against it, or a bite that is even fractionally off — lead to progressive complications that are difficult to correct after cementation.

A specialist prosthodontist has completed three additional years of postgraduate clinical training beyond the dental degree, focused specifically on the precision design, fabrication, and cementation of fixed prostheses. The assessment covers not just the gap to be filled, but the entire occlusal system — how the patient's teeth meet across all excursive movements, and how the bridge will perform over years of normal function.

When natural teeth are being used as abutments, the prosthodontist also carefully considers their long-term prognosis. Crowning a tooth that is already compromised beyond its useful life to support a bridge creates a predictable failure. Specialist assessment at Collins Street Specialist Centre substantially reduces that risk, and ensures the treatment plan is built on a realistic appraisal of the clinical situation.

Referring dentists can be confident that patients will be assessed comprehensively, with clear communication at each stage of treatment and a shared commitment to long-term outcomes.

Our specialists

****Dr Fotios Angelis**** BDS (Hons)(Melb), DClinDent (Melb) Specialist Prosthodontist with a focus on complex reconstructive care, including fixed bridges as part of comprehensive dental rehabilitation.

****Prof Vasileios Chronopoulos**** DDS, MS, PhD (Pros) Specialist Prosthodontist with over 30 years of experience in aesthetic and functional reconstruction, including full-arch fixed bridgework.

****Dr Jamie Foong**** BDSc (Melb), DClinDent (Melb) Specialist Prosthodontist with particular expertise in crown and bridge work and occlusal rehabilitation.

****Dr Simon Hinckfuss**** BDSc, DCD (Pros), Cert.Perio MS (Minn) Australia's only dual-registered Specialist Prosthodontist and Specialist Periodontist — uniquely placed to assess how gum and bone health interacts with bridge design and abutment prognosis.

All specialists at Collins Street Specialist Centre hold current registration with the Dental Board of Australia. Specialist status can be independently verified through the Australian Health Practitioner Regulation Agency (AHPRA).

Related treatments

- ****[Dental Crowns](/procedures/prosthodontics/dental-crowns/)**** — the individual unit that anchors each end of a bridge - ****[Dental Implants (Prosthodontic Restoration)](/procedures/prosthodontics/dental-implants-prosthetic-restoration/)**** — implant-supported bridges avoid the need to prepare adjacent natural teeth - ****[Dental Implant Surgery (Periodontics)](/procedures/periodontics/dental-implants-periodontal-specialist-placement/)**** — surgical placement of implants to support an implant bridge - ****[Dentures](/procedures/prosthodontics/dentures/)**** — a removable alternative when bridgework is not suitable - ****[Full Mouth Rehabilitation](/procedures/prosthodontics/full-mouth-rehabilitation/)**** — when bridges form part of a comprehensive reconstruction plan - ****[Gum Lift / Crown Lengthening](/procedures/periodontics/aesthetic-gum-lift-crown-lengthening/)**** — sometimes required to create the correct emergence profile beneath a bridge pontic
