



## **PIONEERING EXCELLENCE IN DENTAL CARE**

**The replacement of an aged, non-aesthetic metal crown**

**Case Study**

**Nexus Dental Laboratory**

## Overview

# A Smile Transformation

---

The patient was dissatisfied with a previous restoration due to its poor aesthetics and comfort. The crown lacked translucency, appeared unnatural, and was misaligned, causing it to protrude and irritate the lip.

They sought to address these issues and enhance the restoration's appearance and function.



# Clinic Assessment

---



After evaluating the patient's concerns, the surgeon removed the metal restoration and assessed the tooth preparation and gum health.

The preparation, partially rebuilt with composite, and the gums were in good condition.

The surgeon provided the lab with detailed photos of the adjacent teeth and preparation, including shade information, to ensure an accurate, customised restoration that blends seamlessly with the natural dentition.

# Crafting Perfection



## **i. Arrival at the laboratory.**

Upon receiving the case, the CAD team thoroughly reviewed the scans to identify any missing information affecting the crown's precision and fit. This initial attention to detail ensured a smooth workflow and the creation of an exceptional prosthesis.

## **ii. The Blueprint: Designing & Crafting the Framework**

As the CAD team transfers the digital models to the 3D printing room and begins designing the restoration, they work closely with the ceramic department to ensure every aspect of the restoration is carefully considered and optimised. The dental surgeon reviews and approves the CAD team's digital design to confirm it meets the patient's requirements.

The skilled ceramist selects medium translucency zirconia for the crown, offering an ideal balance of strength and natural appearance. To further enhance the aesthetic result and address the varying shades of the tooth preparation, the ceramist incorporates a white liner within the crown. This strategic approach allows for the concealment of colour discrepancies, creating a seamless integration with the surrounding dentition.

# Finishing Touches on the restoration

---



The ceramic team crafted a full-contour zirconia crown with meticulous buccal layering to achieve a lifelike appearance.

They skilfully stained the buccal framework to create an illusion of translucency and depth. In the final stages, the team meticulously polished and refined every surface, replicating the unique characteristics of the patient's surrounding teeth.

They paid attention to intricate details, including the interplay of light, subtle textures, and contours, to ensure an exceptional, natural-looking outcome.



# Join The Nexus Dental Family

---

“

NEXUS DENTAL LAB HAS BEEN INSTRUMENTAL IN THE SUCCESS OF OUR PRACTICE.

**Dr Martin Wanendeya**  
Ten Dental



“

ALTOGETHER THE BEST LAB PARTNER I'VE HAD IN 30 YEARS WORKING IN DENTISTRY

**Eimear O'Connell**  
Owner Bite Dentistry



“

NEXUS WILL THEN ENABLE YOU AS A CLINICIAN TO DELIVER PREDICTABLE, FUNCTIONAL AND BEAUTIFUL DENTAL PROSTHESIS.

**Dr Simon Bate**  
Clavell-Bate & Nephew



# Get Started Today

---

Ready to Transform Your Patient Results?  
Join the growing number of UK dental surgeons who trust Nexus Dental to be their trusted partner. Experience the precision, efficiency, and support that set us apart.



Join Us Today at <https://nexus.dental/>

Scan Here

