

Endodontics

-GLOBAL

#### **ENDODONTICS**

### Endodontic Surgery How does a Microscope assist the surgery?

The introduction of a dental operating microscope moved endodontic science into the twenty first century. A microscope is the best tool to visualise dental anatomy, which wouldn't otherwise be visible to the naked eye.

Advantages of using a microscope:

- O magnified image
- O increase precision and improved visualisation.

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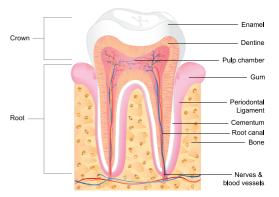
These advantages lead to more predictable treatments which improve the chances of a successful outcome.

# What is Endodontics?

The word "Endodontics" derived from Greek roots, endo - meaning "inside"- and odont- meaning "tooth".

### Why is it needed?

The pulp (nerve) of the tooth is a resilient organ. However, tooth decay, traumatic injuries, extreme tooth grinding, periodontal disease, microleakage and/or wear and tear of the dental restorations



(fillings, crowns, bridges, veneers), can lead to bacterial penetration. Which can, at an intense level inflame the pulp, cause its subsequent death and then become infected.

## What happens during the consultation?

Following the completion of your clinical and radiographic examination we will discuss the diagnosis, prognosis and treatment options with you. A tailored treatment plan, with all the necessary appointments and costs will then be issued. Sometimes if the nature of your problem requires additional examinations, a further consultation may be required prior to the treatment.

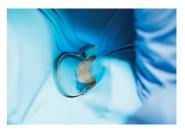
Our aim is to ensure that we have answered all of your questions and clarify all the aspects of the proposed treatment.



## How is root canal treatment performed?

As the cause of periapical periodontitis is bacteria, the main focus of endodontic therapy is the elimination of bacteria from the root canal followed by the permanent filling of the internal space of the tooth to prevent re-infection.

Following local anaesthesia we isolate the tooth with a rubber dam. This is a sheet of rubber positioned around the tooth to be treated and its main purpose is to keep saliva away from the tooth as this contains bacteria. The dam also prevents water spray and irrigating solution from entering the patient's mouth.

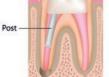


Once access to the root canal is achieved a series of endodontic files (thin instruments) are inserted to enlarge the canal to allow for better cleaning with the disinfecting solutions. If the tooth is highly infected antibacterial paste may be inserted in the root canal and left for a few weeks, with a temporary filling in place until the next appointment.

Once root canal treatment is completed a temporary or permanent restoration is placed in the tooth mainly to seal the root canal access. In most cases (usually molars and premolars) you will be referred back to your general dentist for the final cast restoration, usually in the form of a crown.







In some cases, a post is inserted for extra support



Infected tissue removed; **Canals** cleaned

Crown



New crown cemented onto rebuilt tooth

### Is the treatment painful?

The treatment is always carried out under local anaesthetic and therefore pain free. In some very rare cases when the nerve is extremely inflamed it may be more difficult to numb, however our aim is to always ensure that you have as comfortable an experience as possible.

After the treatment is completed you may experience some tenderness to the area and sometimes painkillers are necessary for a few days after root treatment. In a very small number of infected cases (less than 10%), you may have a post-operative flare up which may include some discomfort, pain and swelling. In these cases you may need some antibiotics.

### Is root canal treatment always successful?

Primary endodontic treatments (first time root canal treatments) are very predictable and if the whole length of the canal can be accessed and cleaned the survival rate is usually over 90% for single rooted teeth.

Provided the tooth is restored with a well-fitting crown (when required) once the treatment is completed it can last for a great number of years.



Maintaining good oral hygiene and frequent dental examinations by your own dentist will help to extend the survival of the root treated tooth.

## I have already had root canal treatment. Why does it need to be re-done?

Root canal treatments do sometimes fail. Common causes of failure are: particularly resistant bacteria, insufficient cleansing of the root canals, missed canals, obstructions and extra-radicular infections (bacteria on the outer root surface) and host response.

If a root canal treatment fails, a re-treatment can often be attempted, provided all the adequate conditions are met, survival rates can still reach 75-80%.

The survival rates and occurrence of complications are based on general statistics from the currently available scientific literature, so please bear in mind that as each person and indeed each tooth is different your treatment may not necessarily respond in the same manner.

# What are the most frequent possible difficulties during root canal therapy?

Although they are very rare, some complications may arise during endodontic treatment. These include the breakage of an instrument within the canal, root perforations, extrusion of irrigating solution through the end of the root or through the rubber dam.

## What is apical surgery and when is it necessary?

Apical surgery or "apicectomy" is a surgical procedure aimed at removing the tip of the root, through which bacteria usually leak, and sealing the root canal from the top with a special type of cement. This is usually done when the root canal treatment and re-treatment have been unsuccessful and it is usually the very last attempt at saving the tooth.

This involves making a small incision in the gum to get access to the root, cutting the tip of the root and clearing any infected tissue from the area. Apical surgery is usually only attempted on specific types of teeth. Once the root canal is sealed the gum is repositioned and sutured in place. The sutures (stitches) are usually removed 3-6 days later. This procedure is also done under local anaesthetic and is pain free.

This leaflet has been drafted to provide an in depth explanation of the treatment you have been advised, its techniques, likely outcome and frequent possible complications. If you have any further questions regarding your case in particular please do not hesitate to contact us for further clarification.

### Our team

All the dentists at NDS are highly experienced – either registered specialists or with accredited postgraduate qualification - in their chosen field of peroiodontology, implantology or endodontics. They are committed to excellence in patient care and providing successful treatment outcomes in a kind, gentle, and caring environment.

### Hamed Karimi - Practice Principal

(BDS (Edin), MSc (Lond), MClinDent (Lond), FDS, MRD RCS (Eng)

A specialist in Periodontics, Hamed is a graduate of Edinburgh University and has a Fellowship in Dental Surgery from the Royal College of Surgeons of England. He specialised with a distinction from Guys Hospital (King's College, London). He works exclusively in dental implants and periodontics and also lectures regularly, both locally and further afield, on these subjects.





# Our fees

To ensure that you fully understand our costs before undergoing any treatment, we discuss and explain all your fees clearly and include them in the treatment plan letter we send you after your initial consultation. As we deal with every patient individually, each treatment plan reflects your particular needs and expectations. You'll find the latest fee guide and price list on our website.

- Whilst we prefer payment by BACS using your unique patient number, we do accept cash and most debit/credit cards
- We encourage 'Pay As You Go', where you make payments in stages over the course of treatment, normally after each visit. This policy reduces our administrative charges
- To help spread the cost of your treatment, we can also offer a monthly, interest-free facility over a six month period. Terms and conditions apply: please feel free to ask for details of this option at reception.

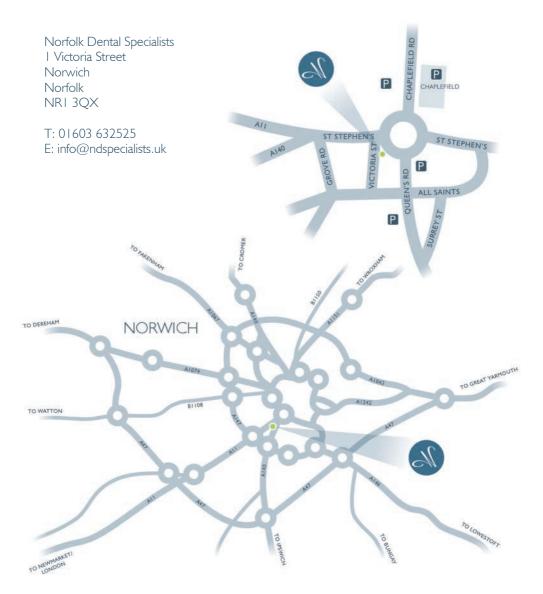
# Our practice

NDS is a specialist, rather than general, practice, specifically dedicated to the treatment of gum disease and the placement of dental implants.

You'll find us on the corner of Victoria Street near the inner ring road - opposite the site of the old Norfolk and Norwich Hospital. We offer limited on-site parking, but there are several car parks nearby (marked on the map), and the main bus station is only a few minutes' walk away.



# How to find us



# ndspecialists.uk