



# RISKWISE

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NEW ZEALAND



## Good enough dentistry

IS IT TIME TO CHANGE THE CONVERSATION FROM 'PERFECTION' TO 'GOOD ENOUGH'?

**TRIGEMINAL NERVE INJURIES**  
Causes of trigeminal alveolar nerve injury are varied

**DENTISTRY AND PREGNANCY**  
The fear around treating pregnant patients

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Practical advice from real life scenarios

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# Editorial



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**W** WELCOME TO THIS LATEST EDITION OF *RISKWISE*, DENTAL PROTECTION'S FLAGSHIP PUBLICATION, OFFERING THE LATEST INFORMATION ON DENTAL TOPICS AND ADVICE FROM DENTOLEGAL CONSULTANTS AND PROFESSIONAL EXPERTS.

## IN THIS ISSUE:

Many of you will be familiar with Professor Tara Renton, who has spoken at several of our conferences in Australasia and has kindly provided an article on trigeminal nerve injuries related to restorative treatment. The article explores the cause of such injuries and how we can minimise the risk of these occurring.

With the bar of expectation continually being raised by patients and colleagues, Dr James Darcey explores the concept of what constitutes 'good enough' clinical dentistry and the development of minimum standards to achieve high quality service and great outcomes.

Professor Leonie Callaway helpfully explores some of the issues around dentistry and pregnancy, where perhaps a lack of clear understanding can limit clinical care, which can lead to problems, dissatisfaction and the development of complaints down the line.

Following these articles, we have a selection of case studies providing examples of situations that our members have experienced. These all conclude with learning points and guidance specific to the circumstances.

The feedback we receive indicates that many dental members are unaware of the extent of the professional development offered by Dental Protection. I would urge you to take a look at Prism and see what is available and how it could be of benefit to you.

As a member of Dental Protection, you have access to some of the best dental experts in the world. Dental Protection is dedicated to protecting members and their reputations, and with over 60 years of experience and expertise assisting healthcare professionals in New Zealand, we are best placed to help you should things go wrong.

## WEBINARS AND WORKSHOPS

As highlighted in the previous edition of *Riskwise*, Dental Protection has been hosting a series of webinars that have proven to be very popular. These webinars give you an opportunity for real-time question and answer sessions during the live broadcast and enable you to have the expertise of Dental Protection brought directly to you.

The latest workshop, 'Building Resilience and Avoiding Burnout' recognises the issues that many practitioners face. We also appreciate that a case may weigh heavily upon an individual clinician and would like to remind members about the counselling service we offer. If you are suffering from stress and anxiety as a result of complaints and regulatory matters, this service is tailored to your requirements. It is delivered by fully trained, qualified and registered psychologists and counsellors, and is entirely independent and confidential.

We are also very pleased to congratulate David Crum, who leads the team for Dental Protection in New Zealand and is CEO of the New Zealand Dental Association, for being awarded the Order of Merit (ONZM) for services to dentistry.

As always, I am keen to receive your feedback about our publications and, in particular, would like to know what subjects you might like to see featured in future issues of *Riskwise*.

Please feel free to contact me at the email address below.

Best wishes,

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# What is good enough dentistry?

*Changing the conversation and moving the bar – restorative dentist James Darcey looks at what constitutes ‘good enough’ dentistry*

**T**he world of dentistry is changing at pace. With the advent of social media we now have unparalleled access to education, peer support and updates on techniques and clinical advancements. Everyone’s opinion is equally valid and the ‘expert’ can often offer no better contribution than the generalist. This offers clinicians the ability to partake in the bigger conversation and hone their development more precisely to their own interests and needs. It may, however, come at a price.

The nature of this type of learning often leads towards excellence, with clinicians posting cases that raise the bar of quality to a level that is worthy of the highest praise, but one that may be unattainable by the masses. Dentistry in these forums can often be glamourised and invariably unattainable. There also remains the huge question of publication bias: clinicians rarely discuss their failures.

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## BEING ‘GOOD ENOUGH’

The British psychoanalyst, Donald Winnicott, coined the term ‘good enough mother’.<sup>1</sup> The phrase began to change the vernacular about how we raise our children. Implicit in this was the concept that perfection is not always, if at all, possible. Going one step further, Bruno Bettelheim, in his book *A Good Enough Parent*, wrote that perfection may not be a healthy pursuit.<sup>2</sup>

“In order to raise a child well one ought not to try to be a perfect parent, as much as one should not expect one’s child to be, or to become, a perfect individual. Perfection is not within the grasp of ordinary human beings. Efforts to attain it typically interfere with that lenient response to the imperfections of others, including those of one’s child, which alone make good human relations possible.”

Seeking perfection focuses the parent on the problems and not the aspects of nurturing, support and key milestones that are good and healthy. Every failure and every blemish is placed under the microscope of scrutiny. Accepting we live in a world with infinite independent variables beyond our control, it should quickly become apparent that no mortal could lay claim to be independent of these.

## WHAT DOES THIS MEAN FOR DENTISTRY?

It may be time to change the conversation from ‘perfection’ to ‘good enough’ dentistry, accepting there will be times when we must strive for perfection, but we may have to settle for ‘good enough’. This doesn’t mean lowering our standards, but rather identifying a group of basic minimal standards, from examination to discharge that, if we can meet them, should give patients a high quality service and great outcomes.

Fortunately, we do not have to leave this to chance; frameworks exist by which we can establish baseline parameters of good clinical practice. Look no further than the pillars of clinical governance.

Pillar	Objectives
Risk management	Ensuring patient safety, patient satisfaction and meticulous evidence-informed clinical practice. Reflecting on outcomes, be they good or sub-optimal, and addressing aspects that may continue or correct such performance.
Audit	Quantifying performance and comparing this to predetermined expectations. Should there be a discrepancy, implement changes to redress this and reaudit. The cycle continues.
Patient and public participation	Seeking out and responding to patient feedback about all aspects of the patient journey from booking in to discharge.
Education and training	Ensuring the team is compliant with training needs targeted to their roles within the practice.
Performance management	Implementing processes to raise concerns with underperforming staff or systems relating to organisational culture, conduct, capacity or health.
Risk management	Ensuring processes exist to identify and mitigate risks. When bad things happen to reflect, learn and implement changes to prevent them happening again.
Information governance	Protecting patient sensitive data.

## SO, WHAT CONSTITUTES ‘GOOD ENOUGH’ CLINICAL DENTISTRY?

In principle, it consists of:

- **A robust dental history and examination**

Treating all patients like new patients is a good starting point: it’s easy to be complacent with long-standing patients and drop one’s guard. Using a template helps to ensure a logical progression through the history and ensures all points are covered. With new BSP guidelines, consideration must be given to full pocket charting on patients with intraoral evidence of periodontal disease.

Dentists are fortunate that investigations are largely limited to percussion, sensibility, mobility, colour, attachment loss and radiographic examination. Ethyl chloride should be abandoned in favour of the more specific and sensitive colder sprays such as Endo Ice or Endo Frost at -50 degrees. Radiographs should be justified, graded and reported on.

- **Accurate diagnosis/es**

There can be no treatment plan without a clear list of diagnoses. These can be both general diagnoses, such as periodontal health, and more specific tooth level diagnoses. The diagnoses should be supported with risk assessments to document the likelihood of future disease.

- **Treatment planning – broken into urgent care, primary disease stabilisation and definitive treatment**

This sets out a plan for the patient that prioritises their care, establishes their ownership for oral health and disease prevention, and provides the appropriate treatment at the appropriate time. A patient presenting with quadrant caries is not a patient who should be offered quadrant conservation until they have made changes that will improve the predictability of restoration and reduce the risk of future restorations. Active caries may be stabilised with provisional restorations and an appropriate preventive regimen established.

A discussion should be had about disease aetiology and a management strategy and, where choices are presented, a reasonable conversation can be had about the risks and benefits of these choices.

This should be inclusive of all core options, with a focus on the likely outcomes of each option. The consent should be tailored to the particular situation, not generic, and it should be an honest reflection of the clinician’s ability. When consulting on the likely success of root canal treatment or the likely outcomes of implant surgery, it is becoming less appropriate to reference text books or journals, but rather the focus should be on one’s own success rates. If those success rates are lower than that of the specialist, the offer should be made to refer. This may be a more involved process for the new patient who is disease active, or it may be a very simple process for the established, stable patient.

- **Delivery of care**

In principle, this should be as smooth as possible. Though the patient may be unaware of the clinical quality delivered, they will be aware of the care and attention dedicated to the process. The importance of the patient’s perception of care and attention should not be underestimated. Ultimately, however, you should ask yourself how would a colleague judge this standard of care? Would they think it was good enough, even perhaps excellent, or would they find criticism? We should aim to provide a standard of care that we are proud of and that we would be proud to show other clinicians. Nonetheless, there are operating guidelines that can help us work with pride.<sup>3</sup>

- **Discharge and follow-up**

Follow-up regimes should be planned according to risk. That risk should take into account the caries risk, periodontal risk, tooth surface loss risk and oral cancer risk. It’s sensible to offer and document shorter follow-ups when treatment plans are more complex or treatment has not progressed as smoothly as anticipated. Patients suffering complications should be more closely monitored, and at the very least, offered an immediate review.

- **Good documentation of all of the above**

- **Referral for care**

When there is uncertainty about a diagnosis it is important to seek help, be it from a colleague within the team or from the wider referral network. If a decision is made to refer, the patient should be informed of the reason why and any likely time delays and costs for future treatment.<sup>4</sup>

## CONCLUSIONS

It is possible to work in healthcare and offer high quality clinical care, but there will be times when excellence is impossible and compromises are necessary. Nonetheless, there are baseline parameters of clinical care from history and examination to delivery of treatment that, if followed, allows good enough dentistry to be provided.

If such core principles are adhered to, excellence will quickly follow.



# Trigeminal nerve injuries related to restorative treatment

*Causes of trigeminal alveolar nerve injury (TNI) are varied, but many occur that are related to restorative dentistry. Professor Tara Renton, specialist in oral surgery, looks into 'prevention first' and recommended management of nerve injuries*

**N**euroopathy caused by local block injections is a well-recognised complication throughout medicine, anaesthesia and dentistry. However, dentistry is the only specialty that still trains clinicians to aim for nerves rather than avoid neural contact (often using ultrasound), which likely explains the continued prevalence of local anaesthetic (LA)-related nerve injuries in dentistry.

There is evidence, using ultrasound, that the benefits of a proximal injection of LA to the inferior alveolar nerve (IAN) are not related to efficacy of the inferior dental block (IDB). A close injection to the nerve is therefore not required. However, what is frequently overlooked is the need to wait for eight to ten minutes for optimal pulpal anaesthesia, and additional repeated IDBs will not improve the success of anaesthesia.

A recent report highlights that the prevalence of IDB-related nerve injuries in UK general dental practice is 1:14,000 blocks for temporary nerve injury, or 1:56k IDBs with patients experiencing permanent lingual or inferior alveolar nerve injury, of which 25% of nerve injuries are permanent.<sup>1</sup>

Nerve injury due to LA is complex. The nerve injury may be physical (needle, compression due to epineural or perineural haemorrhage) or chemical (haemorrhage of LA contents). Thus the resulting nerve injury may be a combination of peri-, epi- and intra-neural trauma causing subsequent haemorrhage, inflammation and scarring, resulting in demyelination (loss of nerve lining).

Only 1.3-8.6% of patients get an 'electric shock' type sensation on application of an IAN block and 57% of patients suffer from prolonged neuropathy having not experienced the discomfort on injection, so this is not a specific sign.<sup>2</sup>

Routine practice in Europe and USA involves warning patients of potential nerve injury in relation to dental injections.

## INFILTRATION DENTISTRY AVOIDING BLOCK ANAESTHESIA

A 2014 survey of German dental LA practice found that 74% of dentists were using infiltration dentistry routinely, avoiding the use of inferior dental blocks (IDBs). Improved comfort was reported by patients who had a preference for having full lingual sensation and shorter duration LA anaesthesia after dental treatment.<sup>3</sup>

Further evidence to support infiltration dentistry successfully includes a study by Evans, Nusstein and Drum et al,<sup>4</sup> which found 4% articaine to be more effective than 2% lidocaine for lateral incisors but not molars, and a recent randomised and controlled trial that found a statistically significant difference supporting use of 4% articaine in place of 2% lidocaine for buccal infiltration in patients experiencing irreversible pulpitis in maxillary posterior teeth.<sup>4</sup> Other studies however – such as that conducted by Oliveira et al – reported no clinical superiority for this injection.

There is evidence supporting the significantly increased rates of pulpal anaesthesia using infiltration anaesthesia, when compared with IDB anaesthesia, particularly for premolar and incisor teeth<sup>1</sup>. Similarly, a recent systematic review reports that articaine is 3.4 times more effective for pulpitis mandibular molars when compared with lidocaine, but there is no difference between articaine and lidocaine maxillary infiltrations or IDBs.<sup>5</sup>

Several reports of supra periosteal infiltration anaesthesia suggest that it is not only sufficient for posterior mandible implant surgery but may be protective of the IAN.<sup>6</sup> When it comes to periodontal and implant surgery, the standard care is infiltration LA, while intraligamental anaesthesia for extractions and avoiding IDBs is also gaining popularity.<sup>7</sup> Paedodontic extractions do not require IDBs as the bone is very porous and susceptible to absorption of infiltrative anaesthesia.

## PREVENTION OF LA NERVE INJURIES IS POSSIBLE

These simple steps may minimise LA-related nerve injuries:

- Avoid high concentration LA for IDBs (use 2% lidocaine as standard). There is increasing evidence that higher concentration agents are more neurotoxic and therefore more likely to cause persistent IDB related neuropathy.
- Avoid multiple blocks where possible.
- Avoid IAN blocks by using high concentration agents (articaine) with infiltration-only anaesthesia. Infiltration dentistry avoids the use of IDBs, therefore preventing LA-related nerve injury, for which there is no cure.

There are two main issues currently for LA: changing practice in using tailored LA techniques rather than always reaching for the IDB, and consenting patients regarding potential nerve injury.

## CONSENT FOR LA

Patients are routinely warned of the risk of nerve injury when undergoing epidural or spinal injections. Reports estimated that nerve injury from neuroaxial blocks (epidurals, spinals and combined epidural with spinals) resulted in sensory or motor nerve injury in 1 in 24–54,000 patients (and paraplegia or death in 1 in 50–140,000 patients).<sup>8</sup>


Germany already has a legal precedent to warn all patients of the risk – something that was originally suggested in the US.<sup>9</sup> With Montgomery setting consent principles based upon what is material to the patient, warning patients of the risk of TNIs, and their unpleasant consequences, should now be routine.

## TAILORED LA TECHNIQUE

Infiltration dentistry avoids the use of IDBs in most cases. IDBs may only be needed for lower posterior molar complex endo, restorative and extraction procedures, thus preventing LA-related nerve injury.

By avoiding IDBs there is less risk of injury to the lingual and inferior alveolar nerves which, though rare, is debilitating to the patients and has no cure. This technique requires less skill, causes less discomfort for the patient during the injection and avoids unnecessary lingual anaesthesia after dental treatment.

## MINIMISE NERVE INJURIES BY USING INFILTRATION DENTISTRY AND AVOID IDBs



**Maxillary dentistry can be performed using Lidocaine 2% with adrenaline buccal infiltration for most procedures**  
There is no additional benefit using 4% Articaine infiltration  
For **extractions** use additional intraseptal LA. No palatal or incisal blocks are required

**Only procedures needing IDB**

- Second third molar restorations if infiltration does not work
- Endodontic procedures may only require IDBs for mandibular second and third molars
- Complex extraction of molars

**Mandibular 7s and 8s for perio, restorations or implants**  
Articaine 4% buccal infiltration with additional Lidocaine 2% intraseptal or intracrestal OR lingual infiltrations  
For **extractions**, Articaine 4% buccal infiltration plus lidocaine intraligamental may be required

**Mandibular 1<sup>st</sup> molars for perio, restorations or implants**  
Articaine 4% buccal infiltration Plus Lidocaine intra crestal, intraseptal or Lingual infiltration  
For **extractions** buccal Articaine 4% infiltration and Lidocaine 2% intra-ligamental

**Mandibular incisors, canines premolars for perio, restorations or implants**  
Articaine 4% or Lidocaine 2% buccal mental infiltration (NOT block) for **extractions** add intraseptal, lingual, intra-ligamental if required

**Figure 1.** Thanks to Andrew Mason from Dundee University for anatomical picture

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# Dentistry and pregnancy

*Leonie Callaway, professor of medicine at the University of Queensland, looks at why it's so important for dentists to understand some of the issues around dentistry and pregnancy*

One of the main difficulties dentists struggle with is their fear around treating pregnant patients. It is an emotive time and everyone is aware of the need to ensure the very best outcome for the foetus. As a result of this fear, and a lack of clear understanding, clinical care can often be more limited than it should be, with a series of unfortunate and unintended consequences for both mother and child. The purpose of writing this is to try to put your mind at ease, and provide some clear guidelines about what is and is not okay during pregnancy.

My area of expertise is as an obstetric physician. We care for women with medical disorders in pregnancy and therefore have particular expertise in the issues around radiation, drugs and surgery in pregnancy, the provision of pre-conception care, and the care of women with high risk pregnancies as a result of pre-existing illness or illness that arises during the pregnancy.

Globally, there are obstetric physicians in all of the major tertiary obstetric hospitals. We work in multidisciplinary teams with obstetricians, neonatologists, pharmacists, radiologists and specialists of all kinds with an interest in pregnancy (eg rheumatology, endocrinology, cardiology, nephrology and oncology).

If you ever have a tricky question regarding care for a pregnant woman, feel free to call your closest tertiary maternity hospital and ask to speak to the obstetric medicine registrar or physician who is on call for the maternity service. They should be able to provide you with advice, and if they do not know the answer to your question, they will be happy to point you in the direction of help. Pharmacists can also be invaluable in providing advice regarding drugs in pregnancy.

## THE LEVEL OF CARE REQUIRED

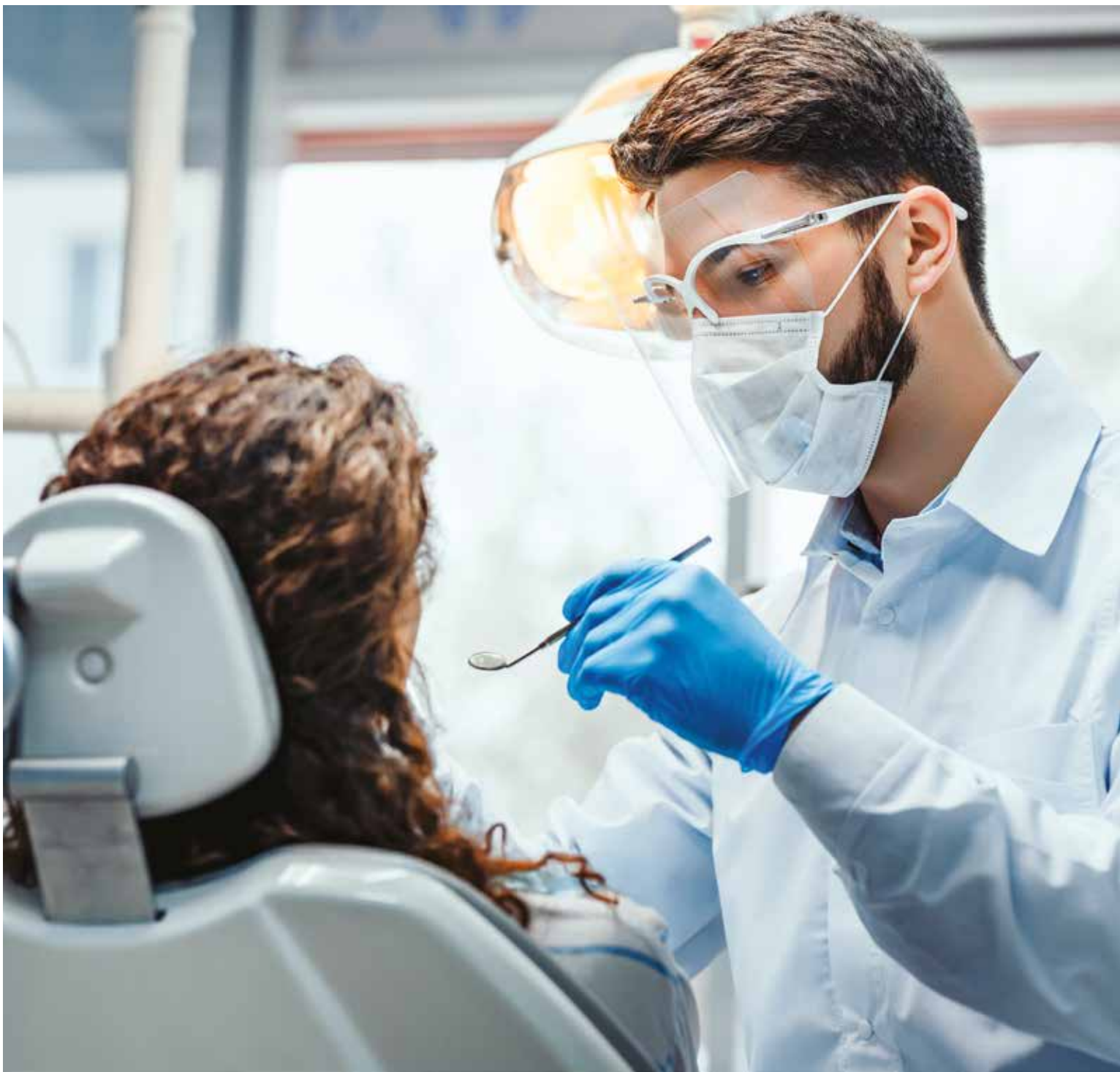
We know that pregnancy worries many healthcare providers and results in fear-based clinical decisions that are often not in the best interest of the mother or foetus. As a general observation, pregnant women often do not receive the care they need from a range of health professionals, due to misconceptions about medications, radiology and surgery during pregnancy.

We have seen pregnant women hobbling around with undiagnosed fractures, because their doctor was fearful of doing an x-ray during pregnancy, or struggle with a sudden deterioration in their asthma, because their doctor thought their asthma medication was unsafe during pregnancy. We also see women with toothache and dental sepsis because dentists were afraid to treat them.

Most dentists find it reassuring to know that the care they might consider providing is quite minor in terms of risk, compared to what goes on for pregnant women on a day-to-day basis in hospitals. For example, a dental radiograph results in a foetal radiation dose of 0.0001 rads, compared to a chest radiograph involving 0.001 rads.

We teach all medical students that if a pregnant woman requires a chest radiograph at any point during her pregnancy, the radiation dose to the foetus is so insignificant, that the risk of not doing the radiograph and not assessing the lungs and heart properly may far outweigh any minor risk of extremely low doses of foetal radiation.

Pregnant women who develop cancer are often given multiple cycles of chemotherapy during pregnancy, and women who develop appendicitis, cholecystitis or hypercalcaemia from parathyroid adenomas are all cared for with appropriately-timed surgery during pregnancy. So, in comparison to the kinds of medications, surgical procedures and radiation exposure that is required to care for pregnant women on a daily basis, dental procedures and dental radiation generally falls into the relatively minor category.



## WHAT YOU NEED TO KNOW

There are a few key messages for dentists providing care for pregnant women or women within the reproductive age range:

### 1. Women of reproductive age need excellent oral health prior to falling pregnant

Ideally, women considering a pregnancy should ensure that all major necessary dental work is undertaken prior to pregnancy if possible.

Dentists should enquire about pregnancy plans when women of reproductive age have dental issues identified, and encourage them to complete treatment plans prior to conception. This provides peace of mind for all involved. Adverse events such as miscarriage, congenital anomalies, growth restriction and premature delivery are common. People tend to associate adverse events with whatever happened to them recently. Providing excellent preconception dental care prevents women associating their dental care with common adverse pregnancy events in their own mind. It also reduces pregnancy associated anxiety for the dentist, which is a well-documented problem.

### 2. Required routine and emergency dental treatment can be carried out at any time during pregnancy

There are multiple guidelines to encourage and reassure dentists about providing regular and emergency dental care for pregnant women. References to these guidelines are included at the end of this article.

### 3. Dental imaging should be used when required

Fear of dental radiation during pregnancy is generally misplaced. The foetal exposure from dental radiation is vanishingly low. Therefore, if there is concern about dental infection during pregnancy and dental radiation is required to assist in determining an appropriate treatment plan, women should be strongly reassured about the risk benefit ratio of dental radiation.

Untreated dental sepsis can trigger pre-term birth, and result in overwhelming maternal infection. High quality dental care, including appropriate dental imaging, can prevent these adverse outcomes.



#### 4. Pregnant women from 28 weeks onward need careful positioning in a dental chair

In advanced pregnancy, women are often very uncomfortable lying on their back and can develop hypotension from the foetus compressing the inferior vena cava. Therefore, from about 28 weeks onwards, a wedge or rolled up towel should be placed under one side of the woman's back while in the dental chair, to ensure the foetus is not sitting on top of the vena cava.

#### 5. Non-steroidal anti-inflammatory drugs need care during pregnancy

In the third trimester (from 28 weeks of gestation onwards), non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided, due to significant foetal risks. These drugs are associated with persistent pulmonary hypertension of the newborn due to premature constriction of the patent ductus arteriosus, foetal renal injury, oligohydramnios (reduced amniotic fluid), necrotising enterocolitis and neonatal intracranial haemorrhage. Unfortunately, the constriction of the ductus arteriosus in the foetus can be related to even a single dose of NSAIDs.

For dental pain relief, we recommend paracetamol. If additional pain relief is required opioid based analgesia is safer, and we would suggest the use of codeine or oxycodone. NSAIDs can be considered in the second trimester (12-28 weeks) if absolutely necessary. If women have been taking over-the-counter NSAIDs for dental pain in the third trimester, encourage them to see their obstetrician so an ultrasound scan to assess foetal wellbeing can be arranged.

#### 6. Individualised decision-making is often required, and communication with other healthcare professionals involved in the woman's care is strongly recommended

Each woman's situation is unique. There are many variables in clinical decision-making for pregnant women who require medications, imaging and surgical procedures. These variables include the woman's own preferences, the stage of pregnancy, delivery plans, foetal growth and wellbeing, weighing of risks and benefits, access to specialised services, newly published research, variations in guideline-based recommendations regarding the safety and acceptability of various medications (eg local anaesthetics, nitrous oxide, antibiotics), decision-making in the context of limited information, and the skills of the healthcare providers involved.

#### CONCLUSION

All of the guidelines encourage communication between the dentist and the woman's other healthcare providers. We strongly recommend good communication with the woman's obstetrician, general practitioner or pregnancy healthcare team in cases where the best plan of action is unclear. We also recommend seeking expert, up-to-date guidance in situations where the published evidence and guidelines lack sufficient clarity to guide decision-making in a particular woman's unique situation.

### HELPFUL READING

- American Dental Association Guidelines on Dental Care during Pregnancy: <https://www.ada.org/en/member-center/oral-health-topics/pregnancy>
- Oral health care during pregnancy and through the lifespan. Committee Opinion No. 569. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2013 (Reaffirmed 2017);122:417–22.
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## Case study

# An unexpected surprise



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**M**s C visited her dentist, requesting an improvement on her overall smile and the specific appearance of the upper lateral incisors. They had been restored with porcelain veneers some years previously and the colour match with the natural adjacent teeth was now unsatisfactory.

Ms C, an aspiring actress currently living overseas, had been regularly attending this particular dentist since childhood. The dentist had placed the existing veneers more than 12 years ago as she had peg-shaped lateral incisors. At a previous visit Ms C had obtained some home tooth whitening gels that she had been using, and the veneers were now a good few shades darker than the rest of her teeth.

She told the dentist she wanted all of her teeth to be a uniform, very light colour. When the dentist removed the existing veneers he noted the underlying vital tooth structure was particularly dark, suggesting there had been some longstanding bond failure. He had recently treated a patient with a similar problem, and so was acutely aware of how challenging it was to replace veneers on a like-for-like basis and create the aesthetic outcome the patient desired.

He therefore made a decision to provide a full coverage zirconium crown on each lateral incisor. For some reason – possibly because he was overloaded with distractions at the fit appointment and was running late – he failed to check the contact point distally at 22 and had not noticed that this crown did not sit correctly. Ms C returned a few days later complaining of sensitivity and a deficient margin palatally that she could feel with her fingernail. It was agreed that this crown would be replaced; however, it became impossible for an appointment to be scheduled due to the patient's overseas commitments.

The sensitivity continued, so Ms C obtained a second opinion and was advised that both crowns had not been fitted correctly. The report from the new dentist was supported by radiographic evidence confirming a sub-standard marginal fit – which explained the sensitivity reported. The crowns were replaced by the new dentist and a letter of complaint was sent to the original dentist from the patient. She clearly felt that she had been more involved in the latest treatment decision than she had been when the zirconium crowns had been discussed, stating that she had not been fully informed about how much of the additional tooth would be sacrificed in order to accommodate the crowns, and what impact this might have long-term. She did not reference the fact that the dentist had been willing to rectify the situation, and that it had been her own scheduling difficulties that had caused the problem to remain unresolved.

The dentist contacted Dental Protection for advice and assistance on how he might manage the complaint, as Ms C was now seeking a refund of his fees and a payment covering the cost of her remedial treatment. Notwithstanding his offer to replace his faulty work, he felt it was unfair that he should be expected to finance the remedial treatment as well. Having lost the trust of the patient, the dentist lost the chance to recover the situation, particularly where there was factual evidence of a poor fit. He also accepted that the consent process had been undermined by his failure to identify how much information the patient needed, specifically around the long-term risks attached to a more aggressive tooth preparation compared with a like-for-like replacement of two veneers.

In her complaint, the patient stated that had the correct information been given at the time she had the veneers replaced, she would have made a different decision. Our advice to the member was that a refund of his treatment fees would not be sufficient to resolve this matter, so we made a contribution towards the additional costs of the remedial treatment.

### LEARNING POINTS

- The law on consent provides a framework that protects patients' rights to make an informed decision about all aspects of their treatment. In this case, the choice of zirconium crowns instead of veneers was not adequately discussed, nor was there anything in the records that we could use to defend the dentist's position. Had the patient taken the complaint further, the member may have been criticised for providing treatment without valid consent.
- Although this outcome avoided any regulatory investigation, the member very much understood the need to ensure similar problems did not arise in the future. This was aided by guided reflection on the details of the case and additional risk management advice provided by Dental Protection's team.

## Case study

# A misaligned complaint



**M**rs T attended an appointment with her regular dentist. The dentist was already aware through previous discussions that she was considering a course of orthodontic treatment to address the mild crowding in her upper and lower arch, along with aligning the upper central incisors, that were mesially inclined.

Mrs T informed the dentist that she was now ready to move forwards with orthodontic treatment. The dentist had considerable experience in providing short-term orthodontic aligner treatment; he carried out a full orthodontic assessment and provided the patient with treatment options, along with the option of referral to a specialist colleague for potential fixed braces. Mrs T declined the referral, so the discussion with the dentist was limited to aligner treatment. The patient was also given information about the anticipated costs of aligner treatment and made aware of the need for permanent retention after treatment had finished. Mrs T was asked to book the next appointment for a further discussion, or to begin treatment should she wish.

At the following appointment, Mrs T said she was sure she wanted to begin treatment, so the dentist carried out the aligner treatment over the course of ten months. The patient was very happy with the final result. The dentist reiterated his recommendation that due to the original position of the mesially inclined upper central incisors, he considered it necessary to have both permanent fixed retention of the upper teeth and upper and lower removable retainers, to guard against potential tooth movement in the future.

Mrs T declined fixed retention because she would not be able to floss. The dentist went on to remind her why permanent retention was necessary and warned of the risk of relapse should she not observe a strict regime of wearing the retainers each and every night. She still refused fixed retention and so the dentist provided upper and lower removable retainers, being sure to document all their discussions in the treatment records.

Mrs T continued to see the dentist for her routine dental care until she moved from the area five years later.

Unexpectedly, three years later the dentist received a letter from the Dental Council informing him that Mrs T had made a formal complaint regarding treatment he had provided eight years previously. The dentist was shocked and disappointed to learn the identity of the patient, whom he always felt he had enjoyed a good professional relationship with.

The dentist immediately contacted Dental Protection, who assisted him in obtaining more information.

It became apparent that Mrs T had been wearing her retainers routinely since the dentist provided his initial orthodontic treatment course all those years ago. However, Mrs T had complained that she had experienced a relapse of the orthodontic treatment and the retainers were no longer maintaining the alignment of her teeth.

In order to establish the current situation, the new treating practitioner's records were examined and these showed that Mrs T had experienced a mild relapse in alignment of the upper anterior incisors, which had begun to become mesially inclined once again. In addition to the complaint to the Dental Council, Mrs T was also requesting that the original dentist pay for remedial treatment to correct the relapse in alignment, as she said she was informed the alignment of her teeth would be maintained if she wore the retainer every night.

However, the records also showed that upon examination, the now discoloured and worn retainer had two fracture lines present and a missing section in the upper anterior buccal aspect that allowed flex and movement of the retainer.

Based upon these findings, including the detailed treatment records clearly evidencing the patient and dentist discussion regarding the advice that permanent fixed retention was strongly recommended, and the fact that the retainer would need to be replaced over time, Dental Protection was able to defend the complaint on behalf of the dentist. We wrote to the Dental Council and stated that the onus was on the patient to continue to wear a retainer that was fit for purpose, and pointed out her refusal to comply with the dentist's recommendations of fixed retention all those years ago had significantly contributed to the problem. There was no finding of fault against the dentist and the case was dismissed.

### LEARNING POINTS

- Always ensure you write detailed records of all key treatment discussions with your patient. In this situation, the information provided to the patient regarding the recommendation for permanent fixed retention – along with the warnings of potential relapse – was recorded. The patient continuing to wear a now defective retainer clearly demonstrated that the dentist was not at fault or responsible for the mild relapse.
- Even many years after an event takes place, a complaint may arise.
- Occurrence-based protection with Dental Protection depends on the date on which an adverse incident occurs, and not the date that the matter is reported to us. This is important because it can often be years before a case is brought and fully resolved. This type of protection offers peace of mind, and in this instance, meant that Dental Protection were still able to provide assistance, at no further expense to the dentist.



## Case study

# Avoiding patient-led dentistry

**M**s B was suffering from pain that kept her awake at night. An examination by the dentist established tooth 27 was the cause of discomfort. The 27 had extensive dental decay and a missing buccal wall. Ms B had an otherwise intact arch and was keen to save the tooth – she did not want a dental extraction.

The dentist explained that endodontic treatment carried no guarantee of success, especially with the extent of damage to the enamel walls, and extraction was offered as the only realistic alternative.

Ms B was quite persistent in her demands for root treatment, along with a full coverage crown, and was unwilling to be referred to a specialist. The dentist felt pressurised by the patient and embarked upon the endodontic treatment against her better judgement.

Five visits later, only two of the canals had been located and the third may have been perforated as it bled on instrumentation. This was discussed with Ms B and the tooth was dressed.

Whilst the endodontic treatment was becoming more complicated, Ms B was still unwilling to consider an extraction and was forceful in her request for the root treatment to be completed by the practitioner.

Further explanations were provided, but despite this Ms B remained convinced that a crown would solve the problem. She decided to visit a second dentist and was informed that the tooth had an incomplete root canal treatment.

The first dentist received a letter of complaint questioning why the endodontic treatment had not been completed in five visits, and why Ms B had been charged for this incomplete and unsuccessful treatment.

Whilst the clinical records were detailed, the practitioner was vulnerable in some areas regarding the clinical care provided. In terms of the preoperative assessment, the restorability status of the tooth at the outset was questionable. During the procedure the dentist could not place a rubber dam because of insufficient residual coronal tissue and, owing to a lack of anatomical landmarks, a perforation occurred. With hindsight, the practitioner realised that the decision to carry out root canal therapy intervention had been a poor one, and she should not have attempted the procedure in the first place.

The complaint was resolved by refunding Ms B for the initial endodontic treatment and with Dental Protection's assistance, there was also a contribution made towards the cost of the second dentist's assessment.

## LEARNING POINTS

- Be alert to patient-led dentistry and the demands of strong-willed patients. Unrealistic expectations should be identified and managed from the outset. The reasons why the treatment is inappropriate should be communicated effectively.
- Avoid being coaxed by persistent patients into carrying out treatments that have a slim to zero chance of success.
- Just because a patient consents to treatment, it doesn't necessarily mean that the treatment is appropriate.
- In this particular case, the complaint was resolved by a detailed letter of explanation and refund of fees.
- In trying to appease the patient, the dentist had spent more than three hours attempting treatment that was essentially doomed to fail, and then had to spend even more time managing the resulting complaint.
- This case highlights the dangers of attempting heroic dentistry; dentists are unlikely to be thanked for lack of success.
- Unrealistic expectations should be managed carefully from the outset.

## Case study

# Delayed postoperative healing following an extraction



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**M**rs C attended her dentist for an extraction of an unrestorable, fractured 37. The procedure was uneventful and postoperative instructions were provided in the usual way.

She returned a few days later in discomfort and the dentist diagnosed alveolar osteitis. The socket was irrigated and the dentist placed a medicated dressing in the socket. The dentist explained the diagnosis, advised Mrs C to take painkillers and offered to book a review three days later.

Mrs C seemed surprised about this and declined the appointment as she had already taken two days off work to attend the clinic for the extraction and the emergency appointment. As there were no signs of infection, antibiotics were not prescribed and she left fairly disgruntled.

Her husband returned to the clinic the next day shouting and being very raucous in his behaviour. He complained to the receptionist that his wife was still in considerable pain following the extraction of her tooth, and stated that this was down to the poor standard of treatment provided by the dentist. He threatened to report the dentist to the press and the Dental Council and said that he had already posted negative comments about the dentist on various social media sites.

The dentist in question was working in another clinic that day and was informed of this event by the Practice Manager. He then contacted Dental Protection for urgent advice as he was concerned about the impact of the critical social media commentary. He discussed the case with a dentolegal consultant and explained that although he was unaware of any press coverage to date, there were a handful of comments on social media attempting to undermine his credibility and professional reputation.

Dental Protection advised the dentist that if he was contacted by a newspaper for a comment, he should find out:

- the journalist's name
- the name of the publication
- the aspects of the care and treatment they were seeking comments on
- the deadline for a response
- the journalist's contact details, including phone number and email address.

We also advised:

- Do not respond to any questions immediately – instead take some time to consider a response and to seek our further advice.
- Maintain professionalism at all times and do not be tempted to discuss a patient's treatment in a public domain. If you cannot discuss the patient's treatment for confidentiality reasons then you should say so.
- Avoid saying 'no comment' as it sounds defensive. Ensure you come across as cooperative and inform the reporter that you will come back to them.
- If necessary, Dental Protection will respond to the journalist/publication on the dentist's behalf.

Steps were also taken to address the negative comments made on social media: the administrator of the social media page was contacted and the unfair and inappropriate comments were asked to be removed.

Dental Protection recognises that patients increasingly use social media channels to highlight concerns about their treatment and care where previously this would have been privately communicated to the practice. We would encourage members to respond to both positive and negative online feedback. Responding to online comments demonstrates you are listening and care about feedback; however, you should always express a willingness to address any concerns offline where confidentiality can be respected.

The situation was amicably resolved by arranging for another dentist to review Mrs C. This dentist confirmed the diagnosis and explained to the patient that dry socket was a recognised complication and that the pain would subside within a few days and the socket would heal.

It is always advisable to request Dental Protection's assistance from the outset when faced with unexpected clinical outcomes and/or complications that may lead to a patient complaint. In this situation, the dentist was able to identify a strategy to manage the adverse social media coverage and potential harm to his reputation by contacting Dental Protection immediately.

### LEARNING POINTS

- **The dentist failed to warn the patient about the possibility of alveolar osteitis at the outset. Consequently, when the patient developed a recognised postoperative complication she became alarmed and blamed the dentist.**
- **An opportunity was also missed when the dentist realised that the patient left the clinic unhappy. It may have been worthwhile considering contacting the patient later on that evening to enquire how she was and provide further support and advice.**



## Case study

# I told the patient... but I didn't write it down

**M** r L visited his dentist complaining of pain in the posterior maxilla under his existing partial denture. Clinical examination revealed redness and tenderness over the upper left second molar.

A radiograph taken at the time of the examination revealed a buried root that was clearly being irritated by the denture. As a temporary measure, the denture was adjusted and Mr L was advised that the retained root should be removed.

The radiograph also revealed the floor of the maxillary sinus was in very close proximity to the root. Whilst the extraction appeared to have been completed without too much difficulty, unfortunately unbeknown to the dentist, Mr L developed problems associated with an oroantral communication (OAC). Mr L did not return to the practice and obtained further treatment elsewhere. This denied the dentist the opportunity to discuss this complication with Mr L and to resolve any potential concerns at an early stage.

Mr L later rang to complain that his new dentist said that the extraction should have been carried out by an oral surgeon and he had been poorly treated. To the dentist's frustration, Mr L then made a complaint to the Dental Council.

The records and radiographs were examined by one of Dental Protection's experts and, despite all efforts to assist the dentist in

robustly defending the case, any defence was compromised by the lack of record keeping. The dentist suggested that it was his normal practice to tell patients of such risks and to offer specialist referrals, however neither he nor his nurse could specifically remember if a discussion had taken place on this particular occasion and he had not recorded any warnings in the records.

As with any regulatory investigation, the registrant's actions are measured against the current guidance and, unfortunately, the dentist was criticised in relation to his record keeping. The Council was more accepting of the treatment issues and determined that, despite Mr L's comments, there was little criticism of the procedure itself. The new dentist had been asked to provide his records and comments and, as is so often the case, these told a very different story to that of the patient. It is very common for dissatisfied patients to interpret what they hear from others differently in an attempt to benefit their cause.

Whilst there was little in the way of sanction, the member was very distressed about the whole process, as it was the first time he had experienced such matters. He felt angry that Mr L had made such a complaint and was very frustrated that he had not made a more detailed record of his discussions with the patient.

### LEARNING POINTS

- If there is a lack of documentation that warnings had been given to the patient, in a dispute it becomes the patient's word against the dentist's and, as the onus is on keeping comprehensive records, criticism may follow when there is an investigation. It is therefore imperative to record the details of the specific warnings given.
- We have a legal and ethical obligation to disclose risks to patients and keep comprehensive records. Without adequate records being made of patients being warned about possible treatment outcomes, it is very difficult to provide a robust defence against a Dental Council investigation, as this case illustrates.
- A dentist could be tempted to alter or add to a patient's record should they become aware that the record is to be scrutinised. With modern technology such changes are easily recognised, and the courts and dental registration bodies take an extremely serious view of non-contemporaneous records being submitted as originals in evidence.



## Case study

# Leaving a sour taste in the mouth



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**A**ssociate dentists leave their current practice for a variety of reasons. Occasionally this can be due to a breakdown in communication and issues surrounding working relationships within the practice. When an associate leaves a practice on bad terms this can be the catalyst for a burst of patient complaints. This scenario can be exacerbated if there is no agreement in place with the practice principal in relation to how to manage remedial treatment.

The NZDA covers these aspects (and others) with every final year class at dental school and provides template employment and independent contracts to young dentists and their employers for their consideration. These can be located within the members section – practice management area of the NZDA website.

### CASE STUDY:

The relationship between a principal and an associate had deteriorated to such an extent that the associate had left the practice.

The associate was clinically very competent and experienced, and had completed a number of challenging ‘tooth wear’ cases.

One particular patient, Mr L, had been treated with composite build up restorations on numerous teeth to conservatively address his tooth wear and the finished result was satisfactory. Whilst the associate’s clinical records reflected the merits and limitations of composite resin versus porcelain restorations, there was no mention that further charges would apply for the maintenance and/or repair of these restorations.

When Mr L required some fairly minimal general polishing of the composite restorations due to surface staining, he said he had not been informed that additional

charges would apply and did not expect the owner of the practice to charge him for this treatment.

Mr L took umbrage when asked to pay for polishing the composites and raised the issue with the principal, who passed the complaint to his former associate. The associate offered to review the patient and provide the necessary treatment at no cost, but the patient was unwilling to travel to see him.

This scenario was not an isolated example; it was a recurring story involving a number of patients who required similar maintenance work. Rather than completing this work as a gesture of goodwill to maintain the reputation of the practice, the principal encouraged every minor concern to develop into a complaint that required a formal response from the associate. The fact that the patients were being charged an over-inflated cost for maintenance treatment by the principal only added to the patients’ dissatisfaction.

The associate contacted Dental Protection and, with the benefit of hindsight, realised that he had not made it clear to Mr L – or to the other patients – that ongoing maintenance would be chargeable. He recognised that there had been no clarity regarding what aspects of the treatment were covered by the original fee and, as a result, patients had made their own assumptions.

Dental Protection advised the associate to talk to the principal and to try and come to an agreement, to avoid further incidents that could be harmful to both their reputations.

The associate and principal reached an agreement between them to cover the reasonable cost of post-treatment maintenance/polish appointments.

### LEARNING POINTS

- This case study demonstrates the importance of clear records and how beneficial it is to maintain a good relationship with colleagues.
- There should be a signed associate agreement that includes a clause regarding the retention of fees for remedial work when an associate leaves a practice. This avoids disputes and disagreements that may arise after the departure of an associate. These disputes are exaggerated where the working relationship has soured.
- When a dentist leaves a practice, inevitably there has to be a point where any further treatment provided by a subsequent clinician becomes chargeable. When planning treatment that requires ongoing maintenance, clear explanations should be given to the patient and documented in the record. This should include an explicit statement as to what the initial fee includes and what charges may apply in the future. This should be set out clearly in writing for the patient and a copy retained in the records so everyone knows what to expect. If there are any queries after an associate has left, the principal and the new dentist have the necessary documentation to support future interventions and related charges.
- Financial disputes between the principal and an associate should be resolved between the two parties and not involve the patient. This aspect should be a ‘back office’ function and disputes should not be played out in front of the patient.

## Case study

# Considering CBCT

*One of the most spectacular examples of new technology in modern dentistry is the increasing use of cone beam computed tomography (CBCT). Dentolegal consultant Jim Lafferty looks at the technique's main areas of awareness and key risks*



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**T**he improvements in assessment, diagnosis and treatment planning are well known – in the fields of implant placement and third molar surgery we have seen significant uptake, and our endodontic specialist colleagues are now also seeing the benefits of using it and how it can improve results for patients.

The use of such technology to improve patient care and reduce risk will be an attractive proposition to all involved, but there are potential pitfalls – awareness of these is vital, particularly given the high costs associated with purchases of this type.

There is a considerably higher exposure to ionising radiation that increases the risk of developing a malignancy, so we should all be able to justify why any CBCT is being used, even if you are prescribing the imaging to be taken elsewhere. There is now a legal requirement to record this justification in writing. Members in other regions where a written justification and report is already mandatory report that this means they are more careful to consider both the benefits and the risks associated with CBCT, and, as a result, have reduced the numbers of CBCT images that they take, reducing the amount of exposure to ionising radiation.

If you are responsible for assessing the resulting image you should ensure that you can demonstrate that you have suitable training for this and make a written record of your assessment of the entire dataset. There are enormous amounts of information to be gleaned from these x-rays, and the person reviewing the slices has the responsibility to check for pathology in all those slices – even at sites distant to the area of interest. Any practitioner providing a radiological report should hold an appropriate Annual Practising Certificate, and maintain their knowledge through continuing education and training, particularly if new equipment or techniques are adopted.

In the accompanying case report, you will see that it is very important to establish who will be reporting on the image.

The key points dentists should consider in the area of CBCT are:

- Arrangements – who will be responsible for reporting?
- Dentoalveolar: For CBCT images of teeth, their supporting structures, the mandible and maxilla (to floor of nose), an adequately trained GDP or dental specialist may do the report.
- Non-dentoalveolar: For craniofacial CBCT or non-dentoalveolar small fields (eg temporal bone) the report should be made by a suitably trained specialist.
- Assess – a CBCT without a prior clinical examination is very difficult to defend.
- Balance – the risks of ionising radiation against the clinical information gained (the benefits).
- Will the CBCT potentially add new information to aid patient management?
- Minimise – can the same information be obtained with a lower dose alternative x-ray, or by a smaller field or resolution of CBCT?
- Justification – record in writing the reason for taking the x-ray. This should demonstrate the benefits outweigh the risks.
- Prescribe – an appropriate resolution and volume (size of field).
- Report – there must be a written report of the entire dataset, leading to your normal recording of diagnosis, discussion of treatment options, planning, risk and consent.

### CASE STUDY:

Mr D was referred to an oral surgeon for pain related to his temporomandibular joint (TMJ) issues. During the early assessments, a CBCT was prescribed, carried out in a remote CBCT and imaging centre, with a specialist radiologist report ordered. Over a year later a further CBCT was ordered from the same centre when symptoms had spread.

The patient went on to develop a cancerous neuroma in his tongue, which by now had spread into the lymph nodes, and was considered inoperable.

The family complained to the regulator, and the oral surgeon contacted Dental Protection. He was particularly concerned, as his records of the patient's treatment were somewhat brief and generally of a low standard, however, with assistance from Dental Protection the member was able to show that he had ordered specialist reports, and that the developing neuroma had been missed in the original scan. It was put forward that the responsibility for failing to diagnose the tumour was not the oral surgeon's. We then worked closely with the member on developing a CPD programme around record keeping, so that by the time of the hearing, he was able to demonstrate that he had shown insight and taken steps to remediate.

Naturally the member was keen to emphasise in his response to the Dental Council how distraught he was at hearing the news but that he did not consider the complaint showed any wrong doing on his part. This was recognised by the Dental Council and the case was dismissed.

### LEARNING POINTS

- **By having the image reported on by an appropriate specialist, the responsibility for spotting pathology outside the area of interest is not the dentist's.**
- **All x-rays should have a written report.**

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# CONTACTS

You can contact Dental Protection  
for assistance via the website  
**dentalprotection.org**

## Scheme of co-operation

If your membership with Dental Protection has been arranged through the NZDA scheme you should contact the NZDA as soon as you become aware of any complaint or other need for assistance.

### Contact

David Crum via Pepe Davenport, NZDA House,  
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