CDF CHRISTIAN DENTAL FELLOWSHIP

Three-in-One

Newsletter of the Christian Dental Fellowship

Going the Extra Mile, or Maybe the 'Extra Smile'?

I found myself going the extra mile; or 31 extra to be precise after one of our council meetings.

For the past few years, CDF council meetings have kindly been hosted by Judith Lawrence at her home in Reading, for which we give our grateful thanks. Whilst enjoying a sunny drive back to Norfolk, I found myself almost at the Dartford crossing having missed my exit off the M25. I was obviously engrossed in prayerful contemplation about the various topics discussed (or maybe just trying to decide what dress to wear that evening- you decide!). Previously, I'd heard that rather foolish folks have been known to go round and round the M25 unaware that it is a massive ring road. I had just joined the throng of such idiots! A verse came to mind:

‘So, if you think you are standing firm, be careful that you don't fall!’ 1 Cor 10:12

How easy it is to get off track and distracted and take a wrong turning. Once we acknowledge that we too can fall, how much more understanding we can be of others’ mistakes. This brings me back to where I started when taking on the role of CDF President. It’s all about Grace, God's Grace so lavishly given to us is what we need to remember and rely upon on a daily basis. Then hopefully, as the one forgiven much, we can find the strength to show grace and forgiveness to others. With God there is always the chance to admit our errors and wrong ways and to start again in the right direction. In the words of the psalmist:

'Blessed is the one whose sin the Lord does not count against them and in whose spirit is no deceit Ps 32:2

in Joel 2:12 we find another picture of God’s Grace and Mercy extended to us:

'Even now, declares the Lord 'return to me with all your heart, with fasting and weeping and mourning' and then the promise of verse 25: 'I will repay you for the years the locusts have eaten...and you will praise the name of the Lord your God, who has worked wonders for you.'

Personally and as a Fellowship we should be continually checking we are going in the right direction under the leading and guidance of the Lord.

As I reflect on my years as president, I see some themes repeating themselves: the need to keep close to God, seek his rest and guidance, in our busy, time-pressured lives and to rely upon Him. It is a challenge to remain spiritually fresh whilst serving even on Christian committees! So maybe it is right we need to be reminded of such things. Another danger is our wish to be independent. God, as three in one, is in relationship and he designed us to be in relationship too. We develop and grow on our faith journey by working with and encouraging one another. As a Fellowship, we can share both our faith and vocation in a unique way and time and again I see the value of CDF as a network of like-minded people serving their Lord. This provides a framework for encouragement and often stepping out in faith knowing the support is behind us. I've recently used the footprints poem as part of a service to explain how we are not only carried by our Lord when unable to walk alongside, but also to illustrate that we are sometimes called to carry and minister to each other; to be as Christ to others.

Thinking of going the extra mile and working together, I would like to sincerely thank all members of the CDF council for their support and hard work over my years as president. Many have juggled CDF duties with already busy lives of work and family commitments - indeed Janet has started a family whilst on council! A

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huge thank you to you all. We are also blessed in having Sarah Felton as our administrator, who definitely goes that extra mile to keep us on track. Together we have been able to streamline some of CDF's work, write policies, increase and update our profile including producing a new logo and new look to Three-in-One. We continue to seek how to be salt and light within our profession and considering how we best do this possibly by working with the BDA Ben Fund. Encouragement and teaching within the fellowship has been greatly assisted by some excellent conferences under the very able organisation of Frances. Hopefully I've learned some management and leadership skills along the way although I've not been able to transfer the secular management tools and skills into the CDF council situation. Maybe Christian leadership IS different and I will be very interested to hear what Justin Thacker has to teach us at our family conference. Together with the Listening course provided by Acorn Trust, this year's conference promises to be a great time of learning as well as the usual warm fellowship. I'd encourage you all to attend and promise you will receive a warm welcome and will not regret it!

In our busyness on council and juggling the many 'balls' in lives in general, we may have dropped one or two and I apologise if that is the case. Please feel free to raise any issues you feel we should be exploring further or any loose ends you are aware of. Time is precious and we all have a challenge to work out what should take priority - remember getting those large stones (i.e. the important things in life)- in the jar first before we fill it up with all the trivia! In the words of 'the gambler' Knowing what to throw away and knowing what to keep' is a skill to be learnt.

When considering taking on this role, a past president encouraged me by sharing that the words for these articles always came and he was right. Thank you to all those who have taken the time and trouble to contact me when something has been particularly helpful- I really cannot take the credit and know that Susie will equally rely upon the Lord for inspiration and so wish her well with her presidency.

However, I failed to achieve my aim of including one apostle in each article! Having established, there were twelve articles to write, I thought I could include this pet subject and see how long it took for members to see the link. Many years ago, having come across churches around the world claiming to have the remains of an apostle, I became inspired to write a spiritual travel book about the lives of the apostles. Exploring their different character traits and how we can find encouragement from their strengths and weaknesses, together with where they travelled in life and in death was to be the theme. Some we know very little about from the Bible and I'm sure that an eminent historian would do a better job that me finding out such detail. Some, such as Andrew, play an important role, but in the background, being the one to introduce Peter to Jesus. Peter, impetuous and fiery, is an example of starting over in the Grace of God time and time again. Judas shows us the danger of not accepting God's forgiveness and Thomas shows us it's OK to be honest and to express doubt. There we go, the mini book is written!

As I write, the country is in turmoil with uncertain leadership and an unsettled financial future. At such difficult times, we need to trust in God's provision, reminding ourselves of the teachings of Jesus 'Do not store up for yourselves treasures on earth....for where your treasure is, there your heart will be also'. Matt 6:19. 'You cannot serve both God and money' Matt 6:24 and 'Seek first His kingdom and His righteousness, and all these things will be given to you as well. Therefore do not worry about tomorrow, for tomorrow will worry about itself. Each day has enough trouble of its own.' Matt 6:33-34. Uncertain times bring opportunities for spiritual growth so let's hope and pray we have the grace and strength to see and act upon these bringing hope and light into our profession.

'The world and its desires pass away, but the man who does the will of God lives for ever'. 1 John 2:17

The service I mentioned earlier was in fact my marriage service! As Church warden and Authorised Worship assistant, we were perhaps a little more involved in putting together our own marriage service and were able to import our own vicar (with two bishops' approval at short notice) as well as put together an amazing, inclusive and unique service; a great day celebrating the grace and love of God as well as the start to our life together.

So as I hand over the presidency, and close one chapter, I start a new chapter of life.

God bless and thank you for the opportunity to serve you as president.

Victoria Rushton/Graham

Nepalese Dental Camp

March 2016 was my second visit to Nepal. I was part of a team which included three dentists, a theatre nurse and my husband who was working with the local church.

Andrew Bottomley worked in Nepal for a number of years. He has returned every two years to Nepalganj on the Indian border with a small team, taking dental care to rural villages where access is almost impossible, through poverty, lack of transportation and few dentists. Camps are hosted by the village church. Word is passed around that we are coming and extractions, fillings, cleaning and preventive advice are provided.

Christianity is recent in Nepal, the first church was established in 1952. Nepal is largely Hindu. Pastor KB in Nepalganj oversees many churches which have been established in the villages in the SW region. Christians are generally free to practice their religion but have suffered discrimination, been marginalized or attacked by Hindu extremists. There is also the pain of rejection by their families.

An afternoon flight to Nepalganj allowed time for the team to browse in the colourful Kathmandu markets, or see the Durbar Square, its temples still needing repair after the earthquake a year ago. We arrived in Nepalganj after dark, to a wonderful reception of floral tributes and singing from the children who had stayed up. Pastor KB had planned an early start so we set to work unpacking the instruments that had been carefully stored for two years, offloading half our luggage which was gloves and LA and ensuring we had sufficient antibiotics and analgesics from the pharmacy.

Over the week we held dental camps in four villages, sometimes staying overnight as journeys were two to three hours each way in the jeep on bumpy and hazardous roads. In each village we received wonderful hospitality from the pastor and church members. Dental camp was set up on garden chairs in the church garden, making best use of the shade and assorted tables for the instruments. Sterilizing using pressure cookers on temperamental kerosene stoves was skilfully managed by young men from the church.

Our first day was in Banke, a village across the great Rapti River and one we had not been to before. It was a relatively gentle start with about 50 patients. Additional church services had been arranged for the day and Andrew Burke joined the pastors in the church for Bible reading, teaching and prayer. The next two days we were in Sonpur. The local people have a high incidence of mesiodens and other supernumaries, so young people came keen to have these removed. Since orthodontics is not an option we provided the best improvement in appearance by extractions. This village had a long queue of patients but we learnt the church members decided to let non-Christian visitors be seen first and return themselves the next day – a witness to Christian love.

We stayed overnight at the nearby Badia National Park Resort, although we all agreed that 'Resort' was a misnomer. While the team had an early morning elephant ride the elder from the church who was our driver had a productive time sharing his testimony with the lodge owner, who introduced him to a Hindu family whose 17 year old daughter was dying of leukaemia. They were asking questions of life and death and whether there is hope and wanted to meet the Christian group. We went to their home and told them of salvation through the Lord Jesus and prayed. Their daughter died later that day but the family will be followed up by the church.

The following morning we moved to Majhgaun for three days and included a visit to nearby Dang. People walk to the camp so we need to make ourselves accessible. Our stay was very comfortable and we enjoyed renewing fellowship with local church members. Young people from the Nepalganj church travelled with us to translate and were by now very familiar with the after extraction instructions and the team worked well. The church was full for an evening wedding, the groom with teeth cleaned for the occasion.

The final day was with the Nepalganj church in their Palm Sunday service with about 600 people and palms cut from the jungle were waved enthusiastically. Nepalis make the most of time together to hear God's word and there were sermons on the Good Samaritan and our Hope in Jesus (1 Peter). At the end anyone with toothache was asked to stand – customers for our final clinic that afternoon. In the evening we were live on Radio Morning Star, broadcast by the church, with tips about prevention.

Through partnership with the Nepali church, dental camps are able to witness to those coming for treatment and those who just come to observe out of curiosity. Pastors and church members have an opportunity to witness by sharing the gospel and distributing tracts while people wait. There were reports of people converted and many wanting prayer.

Hundreds of people, adults and children came for treatment, all were seen. We could not have done this without God's help and prayer. Thank you for your partnership in this dental work and with the church in Nepal. As well as continuing to pray for the church and new believers, the communities in SW Nepal need prayer after devastation by recent fires that have caused some deaths and destroyed many homes including one pastor's home.

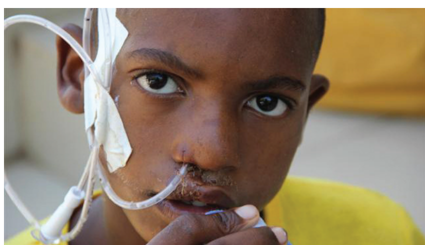
Mary Burke

CDF Mission Partner Updates

The CDF family supports the following dental missionaries financially and prayerfully. We receive quite regular updates which are available to any CDF member from me on request via CDF admin. You will also find lots of prayer points in the prayer calendar.

Tony & Anne Giles (Maxillofacial surgeon, Mercy Ships)
After spending time in Kimili , Kenya doing cleft lip surgery etc., we ventured off again to The Gambia with a larger team to repair Clefts at the Edward Francis Small Teaching Hospital (EFSTH) for the month of April.

We then returned to The Gambia; this time with a team from Norway, Sweden, Canada and the UK. We worked at the Government Hospital in Banjul repairing cleft lips and palates. There is a predominance of cleft palates in The Gambia. This trip we repaired seven cleft palates and five cleft lips.



Two ladies from Nigeria visited us. They are the West African Representatives from The Smile Train. This Charity partners with local Hospitals enabling them to offer free treatment for cleft repairs. They have partnered with both Hope Medical Centre in N'Zao, Guinea and Dreamland Hospital in Kimilili, Kenya.

The name 'Mercy Ships' is warmly welcomed here. We call ourselves 'Friends of Mercy Ships' to avoid confusion as one time they thought the Ship had come!

Thank you for following our journey here and for your prayerful thoughts.

Naomi & Andy
Naomi and Andy work in the Far East. They welcome CDF members to become friends and receive regular updates. They can be contacted through me, Jonathan, via CDF admin.

Andy & Eira Patching (Sachabondu NW Zambia)
Andy has sold his dental unit and it is being set up on the Isubilo site primarily to help secure Chonde's future. After a brief visit to London following the passing of his sister, Liz, Andy returned to Sachabondu as an American team were coming to upgrade the project.

Andy wrote recently: "We have been in touch with an organisation who has offered to re-model the whole of our health centre here at Sachabondu. They are bringing a team and will be employing 40 or so local skilled and unskilled workers for three months which is the time they need to make a huge difference to our lives and especially the local people and the quality of treatment we are able to provide. So it is all systems go to get materials and food for the event."

Lynne & Keith Smith (Dentist and Church Planter, Burkino Faso)

Lynne and Keith wrote earlier in the year: "Following the coup d'etat in October 2015, and the elections in November 2015 Burkina has undergone more upheaval with terror attacks throughout the country. In the midst of it all, we continue to see God at work.

Dental Trainees Burkina Faso

The Dental Training Conference has just finished. Six Christians from three ethnic groups, from two provinces spent ten days in the theory and practice of dental diagnosis and extraction. The goal is to train local Christians in dental work so that the church can continue to offer this as an expression of God's grace to their communities.

"Lynne was joined by dentists Rose from Wales, and Edith from Kenya. The trainees did remarkably well, and worked tirelessly and with good humour in what were huge challenges for all of them. The only man among the trainees, a Fulani called Sambo from Gorom came in for special praise for both his manner and his ability after only 10 days of training.

"The trainees got to put their training into practice - during the week, 223 patients were treated, and 430 teeth were taken out. And they also did dental education in local schools. And people who came for treatment also received the gospel and prayer. One lady in particular, suffering from an abusive past, received peace through Christ.

"The week left an incredible testimony, with people coming to bless the team for bringing God's healing to them. All the trainees passed the exam, and were presented a certificate in "Basic Dentistry Training, Part 1" by the Director of Health for Kaya. Please pray that they are able to continue to develop their skills and learning"

Barbara Koffman (Hygienist, Dentaid)
Barbara is Dentaid's Volunteering Advocate and has been taking dental volunteers out to Uganda for many years. For an up-to-date list of volunteering opportunities with Dentaid have a look at www.dentaid.org/volunteer.

Neil & Jane (BMS, Far East)
Neil and Jane are currently working in the dental department of a major university in the Far East. Their news is available through the BMS confidential mailing or from me via CDF admin.

Simon & Grace Stretton –Downes
Simon and Grace paid a very brief visit to Liberia in March. As a result , they plan to rejoin SIM and go to Trinity Dental Hospital early 2017 and will be added to our support list.

Chris & Polly Barton
Chris and Polly write: “Polly and I had a successful visit to Uganda and Rwanda in February. We were able to visit and stay a few days at six different Mission Hospitals which we had initially been able to set up using Dentaid surgeries to help to facilitate dentistry. We were warmly welcomed back, although not always by a dentist we had met before. At each dental clinic I was able to discuss with the dental therapist to assess any dental needs or equipment problems.
“The new replacement Dentaid dental surgery for Rugarama clinic had arrived some weeks previously, so I was able to install it with the assistance of a dental colleague. The existing Dentaid equipment was set up in 2002 and had been well used.

“Rugarama clinic is being run by a CDF sponsored, newly qualified dental therapist, Glory. She needs our prayers in her busy work, with a new baby, a two-year-old and her husband Ambrose working in Kampala. Another dentist was due to start working with her at Rugarama in March.

“We were able to fund and accompany the dental team on some dental outreaches to village communities, schools and a street children project in Kabale.

“The dental clinics at Gahini, Kigeme and Kibogora in Rwanda are all busy and have 2 or 3 therapists working. The dental work at Kibogora is headed up by a Canadian Dental Surgeon.

“We give thanks for the relatively peaceful Presidential election in Uganda, for our safety in all the travelling and for the on-going dental work and our thanks to CDF for the continued support.”

Jonathan Longhurst
(CDF Overseas Partners’ Secretary)

NI CDF Regional Meeting
Saturday 23 April 2016

We met in Regent Street Methodist Church Hall in Newtownards for morning coffee and buns and relaxed in their family room with comfy sofas. Seventeen dentists, nurses and spouses/family came, ranging from newborn right through to retirement – it was great to see some new faces and a variety of ages, stages and backgrounds, including hospital, orthodontic and general practice, travelling from as far as Katesbridge and Coleraine.

After a brief introduction about the Christian Dental Fellowship, we were updated on news about Stand by Me, including the recent trip to Ethiopia in March as a small team of NI dentists and nurses revisited the school in Bekoji where they had previously treated 480 children. One dental nurse and five friends raised over £6000 for this school by undertaking the tonne run challenge, each running 1000 miles (the width of Ethiopia) in 2015. Last June, eleven dentists and doctors raised £16,000 for Stand by Me work in Columbia by taking part in the Mont Blanc marathon!

Our main speakers, Ossie Bruce and Lisa Light shared very passionately about their recent trips to India and dental work through Emmanuel Ministries Calcutta. Photos and videos of street life, the children and dentistry were amazing and made us feel like we were on the journey too. Hearing more about trafficking, HIV, persecution and poverty was deeply challenging, yet encouraging seeing hope and love in the midst of such desperate need. The pavement club gathered children to sing praise songs – literally the open-air waiting room to put them at ease before getting their teeth checked! Lisa has been travelling to Calcutta on short term trips for ten years and shared her vision for development and opportunities for the future which opened up discussion about the potential of dentistry overseas and portable equipment which was used by the Ethiopia team and prior to that in Romania.

Conversation continued long after closing in prayer - very many thanks to Ossie and Lisa for such an inspiring insight into street life in Calcutta and to everyone for coming!

10 Top Tips For Local Anaesthetics

Here's the third part of my article on Local Anaesthesia. I have summarised some of the past articles contents and added some techniques that I find helpful in my work as a specialist oral surgeon, and included them here as my TOP TEN TIPS.

1. **Good patient management** and confident reassurance will help to reduce the patient's anxiety and consequently can raise the pain threshold.

   You will all be good at this I'm sure, just treat your patients like you would like to be managed or how you would like someone else to treat a relative of yours.

   Explaining the procedure and after effects in a confident tone, making it easy for patients to ask questions if they wish, helps to put patients at ease.

   Give the patient a realistic expectation of what they might feel, i.e. not feel pain but will still feel pressure, movement and vibration. Where possible give some measure of reassurance regarding LA by testing the area anaesthetised to show the patient that they are numb and comparing the numb side to an equivalent non-numb site.

2. Check the **patient's medical and drug history** for any contraindications or cautions to the use of LA.

   This has been covered in the previous articles. Keep up to date with the recent advancements in dentistry and pharmacology. In addition, where extractions are required, there is guidance on patients taking anticoagulants and anti-platelet drugs, along with bisphosphonates on the Scottish Dental Clinical Effectiveness Programme website www.sdcep.org.uk

3. Assess the **patient's maximum dosage** for local anaesthetic, with the patient's MH in mind.

   Refer to the previous tables for a calculation of dosages of local anaesthetics.

   Elderly, frail patients, patients where liver and kidney function are reduced and those with low body weight, may need to be considered alongside children in calculating safe dosages of local anaesthetic.

4. Chose the **most appropriate technique for LA**, based on the site and number of teeth to be treated, keep LA dosage to a minimum.

   If multiple teeth require treatment, then the use of a block as opposed to individual infiltrations will reduce the amount of LA required. If the overall dosage of LA required is likely to exceed the maximum safe dose then consider staging treatment into multiple visits. Articaine is metabolised much quicker (20 mins) than lidocaine (90 mins), so repeat doses of articaine may be given at the same visit if a long procedure is undertaken.

   What should I do when my LA fails?

   A. repeat the injection (IDB or buccal infiltration)

   B. if maxillary, then give palatal injection,

   if mandible, then buccal and lingual infiltrations

   C. supplementary injections: intra-ligamental, intra-pulpal, intra-papillary

   An anaesthetic with adrenaline will give a more profound anaesthesia than one without.

   Reflect on what different techniques or LA could be used; combining Lignospan and Scandonest has a synergistic effect as does other combinations of LA agents.

   If infection is present, antibiotics may need to be given in the interim, and then the patient brought back for treatment.

5. **Lie the patient supine** to avoid faints during the giving of LA and time your injection and giving the bolus of LA to the patient's out breath, when muscles are most relaxed and giving LA is least uncomfortable.

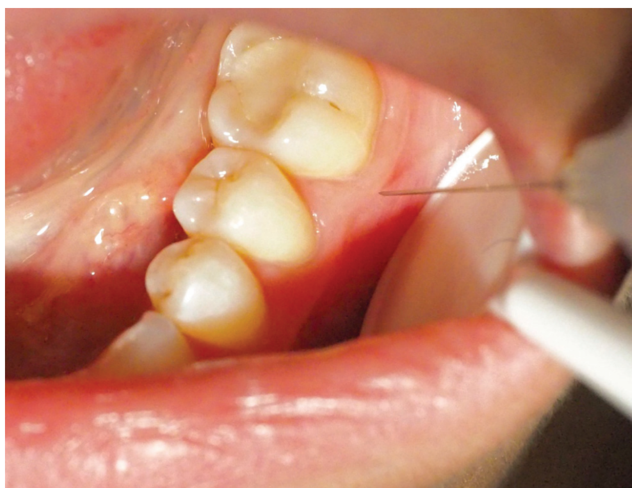
   Patients are often anxious when receiving dental treatment and LA. Pre-empt the patient feeling faint and lay them back into a supine position to give LA. In this position you will also have good visibility.

   Patients often tense their facial, neck and back muscles and grip the chair whilst LA is being given. This means the muscle that the LA needle passes through is tense so the injection is more painful, there is no space for the LA to diffuse into so the injections need to be given at a higher pressure, contributing to pain, and positioning the needle in the correct position is more difficult for the operator. Instead, coach your patients through a breathing exercise whereby they take a deep breath in and then they breathe out as far as they can for as long as they can and relax their face and shoulders on the out breath. Encourage them not to hold their breath and not to breathe too fast or hyperventilate. As the patient is breathing out, and the muscles are relaxing, you penetrate the mucosa with the needle; on the next breath out you inject the LA solution slowly, over the course of a few breaths if necessary for an IDB. If you coach your patients through the breathing with a reassuring tone this helps and distracts them.

6. Try giving **buccal infiltration in the mandible** for individual teeth, or an **indirect IDB** for multiple teeth.

   Articaine 4% is a strong anaesthetic and can be used for mandibular infiltrations in adults, not just children. In addition to the buccal infiltration, intrapapillary injections will give added pulpal anaesthesia and transpapillary injection through to the lingual side will anaesthetise the lingual mucosa for extractions or scaling.

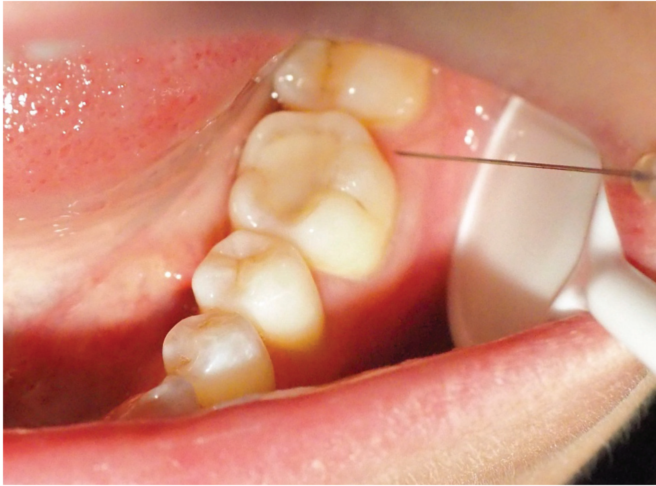
BUCCAL INFILTRATION AND TRANS-PAPILLARY INJECTIONS



Mandibular infiltration given buccally to the tooth; 40% mesial to the tooth and 40% distal at the level of the muco-gingival fold.

Trans-papillary injection from the buccal anaesthetised papillae through the contact point to the lingual side. 10% mesial and 10% distal of the cartridge.

This mandibular infiltration may be easier to give than an IDB and eliminates the risk of nerve damage to the lingual nerve and IDB. However, there are times when an IDB is necessary.

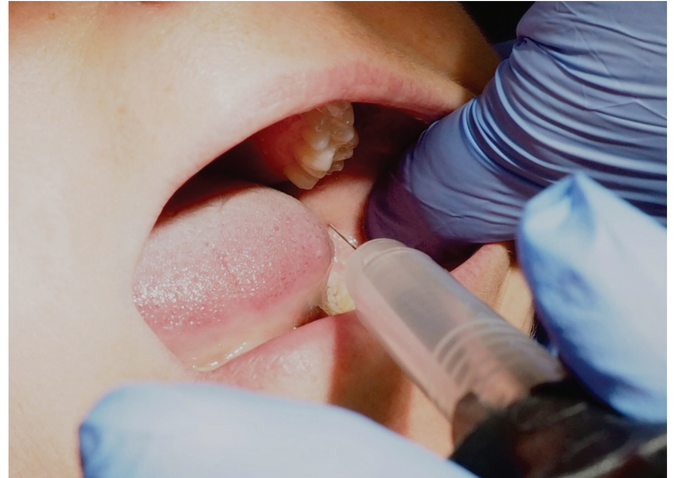


An alternative is the **indirect route**, which reduces the risk to the lingual nerve as the lingual nerve lies medial/lingually to the inferior dental nerve/mandibular foramen.

- advance the needle in a line parallel with the mandibular teeth on the side the IDB injection is being given
- this approach is easier than the direct route if the patient has a large tongue or cannot open their mouth wide
- penetrate the mucosa at the same site as the direct/conventional approach but instead from this more anterior direction i.e. 1cm above the occlusal plane
- the barrel of the syringe should be 1cm above the occlusal plane and kept parallel with the occlusal surface of the teeth
- insert the long needle to approx. 25mm = length of a short needle
- do not insert the needle up to the hub because if it should break then there is no portion of the needle supra-mucosal to access to retrieve the needle
- you do not need to touch bone with the needle
- **ASPIRATE**. If, when you aspirate, you get a show of blood in the cartridge, withdraw the needle, reload a fresh cartridge and repeat
- if no blood is aspirated, then inject slowly over 1 minute, 3/4 of the cartridge
- as you withdraw the needle, slowly inject the remaining LA solution to anaesthetise the lingual nerve also if desired
- if a nerve is touched during the IDB, this will feel like an electric shock or burning sensation to the patient, then stop, withdraw slightly and continue injecting **AFTER ASPIRATING** again
- ask the patient to move their jaw around to dissipate the LA
- wait 5 minutes

THE INDIRECT APPROACH TO AN IDB

Approach anteriorly over the occlusal surface of the molars on the side to be injected. The site of penetration is the same for direct IDBs. 1cm or a thumb width above the insertion of the pterygomandibular raphe. Position the barrel and point of penetration 1cm above the occlusal plane. You do not need to touch bone, advance the needle 25mm and inject after aspirating.



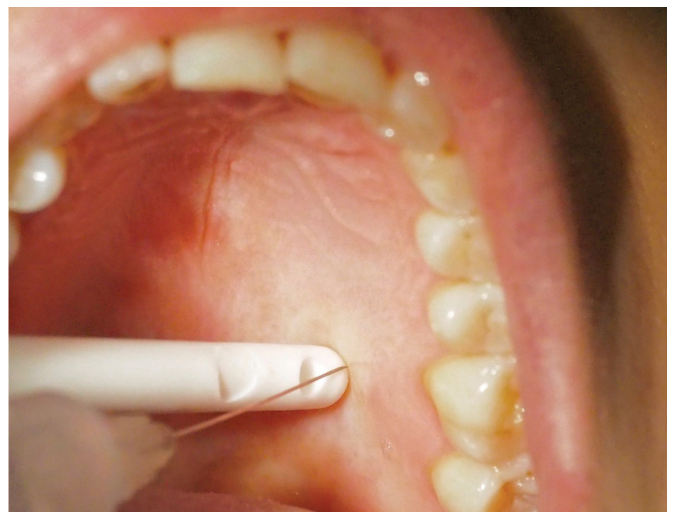
7. Give **trans-papillary infiltration** to numb the palatal or lingual tissues.

Palatal infiltration can be some of the most painful injections to give. Instead try TRANS- or INTRA-PAPILLARY INFILTRATIONS

- the palatal and lingual tissues can be anaesthetised via a trans-papillary injection from the already anaesthetised buccal mucosa
- this will avoid painful palatal injections, especially important in children
- once the buccal mucosa and papilla are numb, the needle is advanced from the buccal direction very slowly, 2mm below the tip of the papilla, injecting as you advance the needle slowly, until the palatal/lingual mucosa blanches
- 0.1ml of LA solution is required and a short or ultra short needle
- the nasopalatine nerve can be blocked by injecting across the papilla
- between the two upper central incisors (trans-papillary), from the central papillae buccally
- trans-papillary injections can be used in the mandible and maxilla
- mesial and distal papilla will need to be anaesthetised
- blanching of the palatal mucosa should be achieved

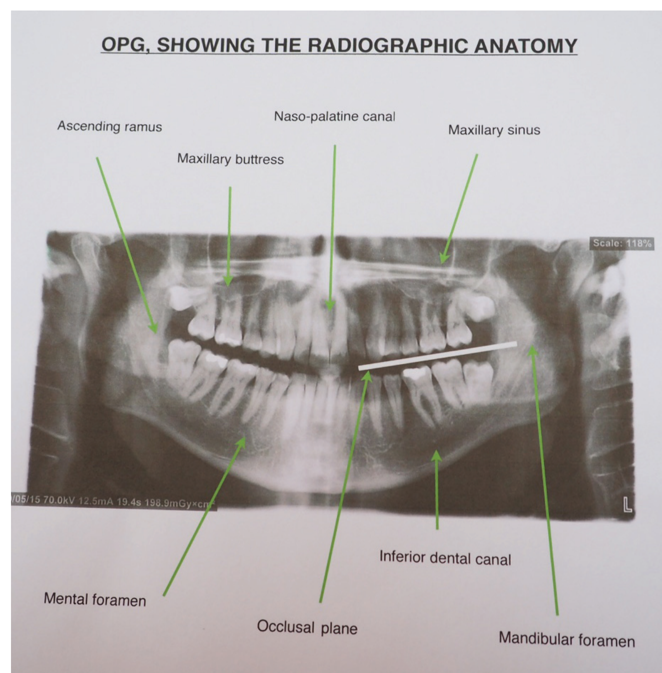
This is illustrated above under the mandibular infiltration.

Alternatively, you can apply pressure with the handle of a mirror in the area to be anaesthetised and whilst blanching the tissues, inject slowly. The pressure from the mirror handle will partially anaesthetise the palatal mucosa.



The application of pressure to the palatal tissues causes ischaemia and as a result partial anaesthesia, making the giving of palatal injections less painful.

8. Look at the **OPG or PA to locate foramen** for IDBs and mental blocks before giving these injections. If the mandibular foramen is higher than the occlusal plane on the OPG then aim the IDB higher initially. If an IDB numbs the tongue but not the lip/chin then repeat the IDB aiming 0.5cm higher.



9. Use LA cartridges at between **room and body temperature**, **inject slowly and supra-periosteally**

   If LA is warmed to body temperature or at least room temperature, this will reduce the discomfort of injections. In addition injecting slowly and withdrawing the needle slightly so the tip is supraperiosteal, will further reduce the pain/discomfort of LA.

10. Adjust the **techniques and dosages** appropriately for children and the elderly

PAEDIATRIC CONSIDERATION WHEN GIVING LOCAL ANAESTHETIC

The differences to keep in mind between the adult and child patient:

a. **The density and calcification of maxillary and mandibular bone**: the bone is more porous in children and the elderly with osteoporosis

b. **Anatomical structures**: the mandibular foramen in children starts off lower and more posteriorly positioned on the mandible and moves relatively more anteriorly and higher up on the ramus, up to the age of 12 yrs. Therefore, the IDB is relatively further back and lower than the occlusal plane than in adults, but overall the mandible is smaller than in an adult. The mental foramen in children opens in an anterior direction but in an adult the opening faces posteriorly. Angling the needle for mental block injections should be from in front for children and from behind for adults.

c. **Penetration** of the needle may be eased with the use of topical anaesthetic: this penetrates for 2-3mm so is useful for infiltrations but not so effective for IDB. This may be helpful in children for infiltrations.

d. **The depth of the needle**: This will be shallower in children: a short needle can be used for IDB and an ultra-short needle for infiltrations, taking care not to insert the needle up to the hub, as with adult patients, in case of needle breakage

e. **Emotional aspect**: good patient management is important in all patients but especially so in children so they don't come to fear local anaesthetics. In children with special needs, the prolonged soft tissue anaesthesia may be a problem as the risk of self-inflicted trauma through biting or sucking to the soft tissues may not be understood fully. An anaesthetic with a shorter period of soft tissue anaesthesia should be considered e.g. a plain LA, as adrenaline prolongs the action of the anaesthetic. Pulpal anaesthesia will however, wear off much sooner and anaesthesia will depend on whether an infiltration or block anaesthesia is given.

f. **Dosage:** the maximum dosage recommended for children will vary according to the weight of the child. See the previous table of recommended dosages.

Karen Paterson
BDS FDSRCS (England)
Specialist Oral Surgeon

Thanks to my dental nurses who posed for and took photographs: Lindsay, Kereena and Keeley

Sources of reference:

John Meechan - Practical Dental Local Anaesthesia ISBN 1-85097-204-4
Available at Amazon

Tara Renton - Professor Tara Renton, Specialist in Oral Surgery, is a Dentist with a particular interest in trigeminal nerve injuries and pain at King's College London, for her informative lectures.

DENTAID Volunteers Work in Refugee Camps in Greece

Volunteers with the international dental charity Dentaid have treated refugees in desperate need of dental care in two refugee camps in northern Greece.

Amir Badrbeigi, a dentist at Chapel Park Dentistry in St Leonards-on-Sea was joined by Laura Bailey, a nurse at the same practice, Laura Westbrook, a nurse at DBS Larkhill, near Salisbury and Dentaid's Kerry Crook on the trip to camps at Nea Kavala and Cherso, from July 1–3.

The team worked alongside Health-Point Foundation and The Red Cross to provide emergency treatment for refugees who had been suffering dental pain for months. The team triaged, treated and provided aftercare for their patients.

If you would like to find out more about volunteering with Dentaid in Greece contact info@dentaid.org
or call 01794 324249

Deadline for the next issue of Three-in-One is 1st October 2016. Please send contributions to Tracey Dalby: editor@cdf-uk.org

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