



UPCOMING
MEETINGS



RECENT
CONFERENCES



MEMBER
PROFILES AND
ACHIEVEMENTS



AAPD COLGATE
RECENT GRADUATE
COMPETITION

AAPD NEWSLETTER

UPCOMING MEETINGS

AAPD Scientific Meeting Perth, WA

The Future Implant Patient. When and how to perform ridge preservation at the time of extraction.

Date: Thursday 14th March 2019

An exciting day is planned for AAPD members on Thursday the 14th of March, 2019 (the day before RK Hall meeting). The presenter will be Dr Wendy Gill Periodontist. Dr Gill and colleagues will present lectures in a morning session, followed by a hands-on afternoon session to prepare the participant to assess the tooth prior to extraction and to plan for ridge preservation at the time of extraction. Participants will be able to handle materials and simulate the clinical situation using pig jaws and modern biomaterials.

For full details of this meeting, please [log into My Account on the AAPD website](#) to view the **confidential Member Only pages**.

EXECUTIVE

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RK Hall Series Perth, WA

The Future of Paediatric Dentistry

Date: Friday 15th- Saturday 16th March 2019

Registrations are now open online on the ANZSPD website! Join us for the highly anticipated RK Hall Lecture series in Perth, with lectures spanning over two days. The theme for the 2019 meeting is "The Future of Paediatric Dentistry", featuring prominent international guest speaker, A/Prof Peter Day from Leeds in the United Kingdom. He will be supported by a number of local and international speakers, to create what promises to be a diverse and engaging series of lectures.

Please join us for a complimentary Sundowner on Friday the 15th of March, and the ticketed Gala Dinner on Saturday 16th March.

AAPD Scientific Meeting and AGM- Melbourne

Date: Sat 12th- Sunday 13th October 2019

Please join us for the AAPD Scientific Meeting and AGM. Dr Anne O-Connell has been confirmed as the international guest speaker.

Post-graduate day- Friday, 11th of October
Dinner- Saturday the 12th of October

Included in this exciting event, will be the recent graduate competition (graduates from 2014-2018). The topic will be a controversy relevant to Paediatric dentistry and abstracts will be due in July.

TIMELINE OF UPCOMING MEETINGS



Meeting Updates

AAPD Meeting- Sydney October 2018

The AAPD Meeting in Sydney was a roaring success with numerous specialists and post graduates attending. The two day meeting was busy and started with a post graduate day followed by a day and a half of lectures by AAPD members and invited guests. Our guest speaker was Dr Christine Carter, a Paediatric Dentist and Orthodontist from New York.

Post Graduate Afternoon

An informal afternoon session was organised for the post graduates, including lectures from Dr Christine Carter on Cleft Palate treatment and then very honest discussions by AAPD members Dr's Wong, Jason Michael, Harleen Kumar and Erin Mahoney. This day was well received and was capped off with a glass of wine together prior to the beginning of the AAPD conference.

Member Profiles

The aim of this section of the newsletter is to introduce both new AAPD members, as well as established AAPD members



PROFILES: RECENT AAPD MEMBERS

Dr Alice Howarth

What brought you to becoming a Paediatric Dentist?

As an undergraduate dental student I don't think I really understood what it meant to be a Paediatric Dentist. In my first year out of Dental school I worked as a Dental Officer at Westmead Centre for Oral Health. In this role we rotated around specialties and in my first year this included a 3-month rotation through the Paediatric Dental department. There I worked under some fantastic consultants and registrars and first developed an insight and an appreciation for Paediatric Dentistry. From there I became really interested in the principles of treatment planning for children and really enjoyed practicing Paediatric Dentistry within the hospital environment. I went on to apply for a paediatric dental residency position the next year and started working on call at Westmead Children's Hospital. I knew from there that I had found my career path and would eventually specialise in Paediatric Dentistry.



Where do you work now?

I am working at a private practice, Paediatric Dental Care, with two other Paediatric Dentists in Adelaide. I am also involved with some of the undergraduate Paediatric Dental teaching through the University of Adelaide and have recently taken on the position as President for the ANZSPD South Australian branch, which is keeping me very busy.

Where do you see your future in Paediatric Dentistry and what aspects of Paediatric Dentistry do you prefer most?

I really enjoy the range of roles and flexibility that paediatric dentistry can offer. I enjoy variation and ideally would like to be involved with teaching as well as working both in public and privately. I think it is important to be part of this society and be connected to like-minded professionals across Australia and New Zealand to learn from our senior staff as well as support the young professionals coming through. I am interested in continuing to work and promote paediatric dentistry through with the ANZSPD and if given the opportunity, the AAPD in the future.

What do you like doing outside Paediatric Dentistry?

I love the outdoors, be it running, swimming, biking or paddle boarding. I try and stay active and am usually doing some form of exercise most days.

I love New Zealand and try and get back at least 1-2 times a year, preferably to see my family in Wanaka for some skiing in August then back again at Christmas for some tramping and mountain biking. I am a bit of a foodie, enjoy cooking and have been making the most of the fresh fruit and produce in South Australia and of course the winery regions. I have recently signed up for a painting class as well so we will see how that turns out.

PROFILES: EXPERIENCED MEMBERS

Dr Mike Brosnan

What are you doing in your career now and what things do you most enjoy about being a Paediatric dentist?

I work at Waikato Hospital looking after paediatric dental patients referred from primary care.

I most enjoy making a difference in terms of my patient's attitude to dentistry following engaging the individual as a person and developing a rapport.

With some referrals, especially for children and adolescents with high special needs, it is the first time that the patient has managed a dental examination. The gratitude and surprise expressed by the patients and their carers is what sets us apart as caregivers and is seldom understood by the medical and dental profession.



How did you get into Paediatric Dentistry?

I had my “epiphany” when attending a paediatric dental conference. I was inspired by the passion of the speakers and other delegate paediatric dentists.

How has Paediatric Dentistry changed since you started as a specialist?

Health care professionals and the general public have begun to understand what we do as a specialty and the difference we make. However we still have a considerable journey to travel in terms of leading treatments for those patients who need specialist input. Equally well, our specialty needs to lead and oversee the oral health care strategy for fit and well children and adolescents.

You have done so much in and for Paediatric Dentistry- any favourite memories or patients?

Being unexpectedly kissed on the lips in gratitude by a thirteen year old boy with special needs while he shook my female dental assistant's hand at the end of treatment. That was fifteen years ago in Leeds in the UK. I think his mum's absolute embarrassment is just about subsiding now. It reinforced for me to always expect the unexpected in paediatric dentistry!

What do you love doing outside of Paediatric Dentistry?

I love history, reading and long walks which help keep me from being sectioned!

Member Achievements

Jilan Patel

Well done to Jilan, who won the poster award for the category clinical management of ECC at the recent IAPD Global Summit on Early Childhood Caries, in Bangkok, Thailand 2018.



Katie Ayers

Katie has recently been nominated to become the president of the New Zealand Dental Association (NZDA). Congratulations Katie!

Erin Mahony

Erin has recently been appointed as an executive officer for the Royal College of Australasian dental surgeons- she will represent us extremely well.



Dr Mani Ekarambaram

Mani is currently involved in various research ventures in Paediatric dentistry and has recently won a \$14000 grant to investigate bonding universal dental adhesive resin to developmentally hypomineralised enamel.

Please contact AAPD VP (Caitlin Agnew) for member achievements to be announced in the next newsletter

AAPD Colgate Recent graduate competition

The Colgate recent graduate competition is held every year at the AAPD meeting. Paediatric dentists (who recently graduated) submit an essay on a controversial topic, relating to Paediatric Dentistry. Successful applicants then present a short lecture at the AAPD meeting. Below are two of the essays from the successful applicants in 2018.



Lloyd completed his Paediatric Dentistry specialty training in 2017 at the University of Adelaide. He worked at the Women's and Children's Hospital, Adelaide for seven years and has recently moved back to his home town of Sydney to take up a Consultant position at the Sydney Dental Hospital.

The Right of Australian Children to Access General Anaesthetic Services for the Management of Early Childhood Caries

Early childhood caries (ECC) is a chronic, preventable disease with a high prevalence and significant health burden in Australia. Untreated ECC is associated with multiple short and long-term complications for the child affected. While there are many options to manage ECC, in some instances, treatment can only be completed effectively under general anaesthesia. There is, however, a troubling disparity in access to general anaesthetic services across Australia's public paediatric dental system, as different States and Territories have varying criteria for eligibility. Some children are thus unable to access the necessary treatment they require. This is unethical and not consistent with principals of the Australian Healthcare system, nor the United Nation's Convention on the Rights of the Child. Inevitably, there are challenges and potential issues with the introduction of a system that would allow universal access for all Australian children, but it is the role of Paediatric Dentists and the professional bodies that represent us to advocate for our patients and ensure that those who require care receive it.

ECC is defined as the presence of one or more decayed, missing, or filled tooth surfaces in any primary tooth in a child under the age of 6 years.¹ It is highly prevalent, with approximately half of all Australian children having some caries by 6 years of age.² It is particularly common and severe in vulnerable subpopulations including low socioeconomic status, Indigenous and immigrant populations.^{2,3} Indeed, the top 10th centile of Australian 6-year-old children with ECC had an average dmft of 9.89, over 5 times the national average.² Of particular concern is the high rate of untreated disease. Do and Spencer (2016) reported 1 in 4 (26.1%) children aged 5-6 year had untreated decay in their primary teeth and Mejia et al (2007) reported untreated decay as high as 71.4% in 5 year-olds nationally.^{2,3} Children in households with a low income have almost twice the prevalence of untreated caries in the primary dentition (35.9%) compared with children in households with the highest incomes (18.3%).³ Indigenous children had the highest rate of untreated decay (44.0%).³

Untreated ECC is associated with significant short term and long-term complications. Short-term impacts such as discomfort and pain lead to decreased quality of life and potential emotional and social consequences.⁴⁻⁶ Eating and sleep dysfunction associated with ECC can lead to disrupted growth and development.^{4,6} Children with ECC also experience a greater number of school days missed and decreased participation and concentration.^{4,6}

Serious acute complications of untreated ECC such as infection and cellulitis can potentially cause septicemia and airway compromise. Emergency management for this generally requires hospital admission which is stressful, time consuming, costly and does not always result in final, definitive care for the child.⁶

ECC is associated with a higher risk of new carious lesions in both the primary and permanent dentitions.^{4,7} Other potential longer-term issues include enamel defects in permanent teeth and orthodontic complications such as reduced arch

length and tooth displacement.⁴ ECC can also cause a significant burden for the child's family and their wider community.^{4,6} These complications highlight the importance of prioritising effective management of ECC, and of ensuring the necessary treatment being available to all children who require it.

Management of ECC aims to minimise the adverse impacts of the disease. It requires a holistic, family-oriented approach that treats the aetiology of the disease and not just its symptoms.⁸ Preventative care should form an important part of management for all patients with ECC.⁸ Techniques such as remineralisation, 'Atraumatic restorative technique' or the 'Hall technique' can all provide useful, minimally invasive options.⁸ However, in many instances, restorative and surgical management is required. Children may be in pain, have acute or chronic infection or require complex restorations and extractions. There is a range of non-pharmacological and pharmacological techniques that can aid restorative and surgical treatment but in children who have a large restorative burden, are particularly anxious/un-cooperative or have complex medical issues a general anaesthetic procedure may be required to allow safe and successful treatment. In these situations, a general anaesthetic should not be considered an elective option in the child's management, but rather as a necessary component of their comprehensive care.

There is significant evidence to support the use of general anaesthesia in the management of ECC when indicated. Treatment completed under general anaesthetic has improved restorative outcomes and several studies have shown considerable improvement in Quality of Life indicators following the procedure.^{9,10}

While a general anaesthetic may be indicated for effective management of ECC, some Australian children may not be eligible for such treatment in the public health system. Eligibility varies depending on which State of Australia a child is accessing care (Figure 1). In some State and Territories, universal access is available for any child with a Medicare Card. In other States, eligibility is dependent on a child having a valid Centrelink Concession Card.

A Centrelink Concession Card is provided to families with low-income status or unemployment and to people with a disability or caring for someone with a disability.¹¹ A Low Income Health Care Card is provided to a family if their gross income over an 8 week period is less \$954.00 per week.¹¹ This corresponds to an annual income of \$49 608.

While an annual income greater than \$49 608 makes a family ineligible for Centrelink benefits, it is difficult to expect such an income would be sufficient to afford private specialist paediatric dental treatment completed under general anaesthetic. Indeed, such an income is well below the median gross household income of \$84 032 per year (2015-2016) for Australian families.¹² It is important to recognise that these families are also unlikely to be able to afford Private Health Insurance, further increasing the burden of their private dental care. As such, a child's parental income can be a significant barrier to them to receiving the treatment that they require.

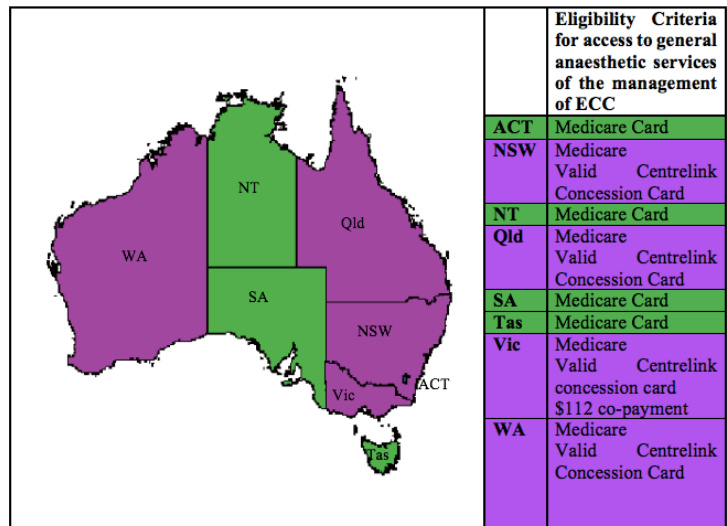


Figure 1. Eligibility Criteria for access to general anaesthetic services for the management of ECC in Australia’s Public Health System (Criteria taken from the Department of Oral Health website for each State and Territory).

There is good evidence to show that parental income is a barrier to treatment throughout Australia. An Australian national survey completed in 2010 identified that almost 30% of children experienced a financial barrier or hardship associated with accessing dental care.¹³ It is reasonable to presume that barriers to accessing general anaesthetic services would be much higher still, as this survey assessed barriers to all types of treatment.

Comparing the oral health status of children in different States and Territories is difficult due to the complex aetiology of ECC, and as such conclusions need to be made carefully. However, there is some data available that compares the rates of untreated caries in Australian children aged 5-6 years.³ It shows that in most States (SA, ACT and Tasmania) with universal access to general anaesthetic there are lower rates of untreated decay than States with eligibility criteria (Figure 2).³ This is potentially related to improved access for children to general anaesthetic services.

Figure 2. Prevalence of untreated decay and overall caries experience in the primary dentition of 5-6-year-old Australian children (data taken from the National Child Oral Health Study 2012-14).³

In States where general anaesthesia is not universally provided, a vulnerable group of children is created. These children do not receive the care they require because they are not eligible for a Centrelink Concession Card and their parents/caregiver are unable (or unwilling) to pay for treatment privately. They are therefore susceptible to the short and long-term complications of untreated disease. In other fields of medical care in Australia, such a discrepancy does not occur because universal access exists. A child’s right to access the healthcare they require is considered a core aspect of policy development. This disparity between oral health and other areas of medicine is worrying and should be clearly stated.

Children are the most vulnerable group in our society and should be protected. The 'Convention on the Rights of the Child' (1989) and the 'Charter on The Rights of Children and Young People's in Healthcare Services in Australia' (2017) identify that health services should be accessible to children without discrimination, including discrimination on the basis of socio-economic status.^{14,15} Further, every child and young person should have the right to the highest attainable standard of healthcare.¹⁵ As such, universal access for children requiring general anaesthetic for management of ECC should be a goal for all public policy developers in every State and Territory of Australia.

Children require special care for several reasons. Firstly, children experience disease and disability, including dental disease, in a different way to adults. They are more susceptible to harm and as such should be entitled to the necessary care and support.¹⁵ Children are also particularly vulnerable because of their developmental immaturity.¹⁵ Our society is structured so that children lack political and economic power and have very little ability to influence decisions that may affect them directly or indirectly.¹⁵ As such, children require advocates to uphold their rights. It is our responsibility as Paediatric Dentists to advocate for our patients' rights and to improve their health outcomes. The professional bodies that represent us, such as Australian and New Zealand Society of Paediatric Dentistry and the Australasian Academy of Paediatric Dentistry, are well positioned to develop a joint consensus that would add strength to any political lobbying addressing the current inequity.

There are of course complex practicalities that need to be considered before any changes to policy can be made. Indeed, the public health system has limited funding and requires careful budgetary management. Dental treatment completed under general anaesthesia is resource intensive and expensive to the tax-payer. General anaesthesia should be a last-line management option and only used when fully justifiable.

Currently, the public dental service in many States would be under-resourced for the introduction of a scheme that provides universal access to treatment under general anaesthetic. Waitlists could increase to ineffective and impractical levels, having a detrimental impact on children who are currently eligible and highly vulnerable. Nonetheless, expense is not a justification to deny access to necessary treatment.

Appropriate funding and resources would need to be allocated for any successful scheme. Schemes that use the expertise and infrastructure of the private sector could be a helpful means to increase access to treatment for all children with ECC, while ensuring waitlists remain acceptable in the public system. Prompt access for particularly vulnerable children (such as medically compromised, special needs, Indigenous, and very low-income children) needs to be maintained as a priority. While the public sector needs to be adequately funded it also needs to be held to account with regards to quality, productivity and efficiency.

In conclusion, ECC is a highly prevalent disease with significant impacts and should not be ignored. Whilst management of ECC requires a holistic approach

with primary prevention at its core, treatment under general anaesthetic is required in specific situations. Currently, not all children who require this treatment are able to access it due to policy and system barriers. This is unethical and not consistent with the values of our healthcare system nor the International Convention of the Rights of the Child. Paediatric Dentists and the professional bodies that represent us, are in the perfect position to continue to raise the profile of ECC as an important health issue and demand the appropriate resources required to manage it effectively. This includes advocating for universal access for children who require general anaesthetic services as part of their management of ECC.

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Dr Mihiri Silva completed a Bachelor of Dental Science in 2004, Master of Dental Science in 2012 and Doctor of Clinical Dentistry (Paediatric Dentistry) in 2013, all at the University of Melbourne. She is currently in the final year of a PhD through the School of Paediatrics, University of Melbourne based at the Murdoch Childrens Research Institute/Royal Children's Hospital. Mihiri's project is a study of twins and aims to better understand the early life risk factors for common dental conditions like tooth decay and enamel defects. In addition, Mihiri has recently worked with the RCH Poll team to investigate the oral health knowledge, attitudes and habits of Australian families. Mihiri also provides clinical care in private practice in Melbourne and is the oral health promotion officer at the Department of Dentistry, Royal Children's Hospital. Mihiri is involved in teaching and

clinical supervision of general and specialist paediatric dentistry trainees at the Melbourne Dental School, University of Melbourne.

Dental Caries - take it or leave it?

Untreated dental caries is common, affecting 60-90% of children worldwide. Because of the importance of teeth to mastication, speech, appearance and general health, untreated dental carious lesions have major impacts on child health and well-being.¹ The traditional management of deciduous teeth with carious lesions is invasive, costly, complex, potentially anxiety-inducing and inequitable.²⁻⁴ However, the biological approach to the management of dental caries in children, epitomised by the Hall crown technique (HT) has hailed a paradigm shift away from the traditional 'drill and fill' restorative dentistry.⁵ As opposed to removal of carious tooth structure, sealing in caries is simpler to perform and less costly, involves less pain and anxiety and may avoid hospitalisation, and therefore is likely to be a valuable management option for dental caries in the deciduous dentition, particularly in general practice settings.⁵

Dental caries was once considered an infective condition with a very specific microbial aetiology.⁶ However, a range of microbial species are now associated with dental caries initiation and progression.⁷ All these species share acidogenic and acidoduric properties, being able to produce acid and/or survive in highly acidic environments. This functional consistency between the various identified pathogens, together with a growing understanding of the importance of diet (substrate) and saliva in the caries process, has contributed to the ecological plaque hypothesis.⁷ A key component of this widely accepted hypothesis is the importance of the plaque environment, that is the availability of substrate and the ability of bacteria to produce and maintain an environment that favours demineralisation of tooth structure.

Until recently, despite the evolution in understanding of the caries process, and recommendations for a minimally invasive approach to restorative dental care,

there had been little change in the management of dental caries, which required the surgical removal of tooth structure. However, based on the ecological plaque hypothesis, the Hall and other 'sealing' techniques adopt a more biological approach, targeting the cause of carious lesions – the environment, or the 'ecology' of the plaque biofilm.⁵ The use of stainless steel crowns, which provide an optimal seal, ensures the bacteria are deprived of essential substrate, leading to disease arrest. The current recommended applications of the HT are for primary teeth with one and two surface cavitated and non-cavitated lesions, without clinical or radiographic signs/symptoms of irreversible pulpitis or sepsis.⁸ The HT is contraindicated in very young, pre-cooperative children, or those with multiple advanced lesions, signs of irreversible pulpitis or periapical pathology.

A randomised controlled trial comparing the HT to standard control restorations performed by general dental practitioners found that after 5 years, the HT resulted in significantly fewer complications such as restoration loss, reversible pulpitis and secondary caries (5% vs 42%) and major complications such as irreversible pulpitis, abscess, loss of pulp vitality and unrestorable tooth (3% vs 16.5%).⁹ Even when performed by specialist paediatric dentists, the success rates at 77 months of the HT and conventional restorative treatment were comparable, at 95.3% for conventional and 95.8% for the HT.¹⁰

There are strong public-health benefits to the HT. In Australia, 41.7% of 5-10-year-old children have experienced caries in their primary teeth, only marginally lower than 30 years ago.³ Dental caries is not experienced equally across the population with 20% of children representing 80% of caries experience. Further, over one quarter of Australian children aged 5-10 years have teeth with unrestored carious lesions indicating that professional dental care is currently inadequate. The skewed nature of dental caries experience is marked by social patterning with children from low income and low education backgrounds more likely to have experienced dental caries and even more likely to have untreated dental caries.³ The wide prevalence and social patterning characterising dental caries experience in Australia occurs as the cost of health care in Australia rises rapidly. Treatment of dental disease costs the Australian economy more than \$9.9 billion a year.² Due to the broad eligibility for public dental services in most states, a considerable portion of the cost of dental treatment for young children is borne by government. The HT is significantly more cost effective than conventional treatment.¹⁰ Reducing expenditure on dental treatment will enable both individuals and governments to instead direct funds towards prevention, with much more profound long-term benefits.

The HT provides major workforce benefits by improving the clinical effectiveness of restorative care in general practice/primary care settings. General dental practitioners prefer adhesive glass ionomer and composite restorations instead of conventional stainless-steel crowns in primary teeth, despite the clinical superiority of crowns in teeth requiring large restorations.¹¹ However, the HT has been found to be more acceptable to general dental practitioners than conventional care. In Scotland, the birthplace of the HT, the popularity of the technique that led to an increase in the use of stainless steel crowns, from 599 in 2000 to 7183 in 2016.⁸ The increased clinical effectiveness of restorative care provided in primary care settings not only relieves workforce and cost issues but

has important implications for child oral health as it is likely to lead to fewer unrestored or poorly restored carious teeth.

The HT may curb the increasing rates of hospitalisation and dental general anaesthesia in children. Over 26,000 Australians under 15 years of age are admitted to hospital for the treatment of dental caries annually, making it the highest cause of acute, preventable hospitalisations.¹² In addition to the widely recognised, albeit rare serious complications, general anaesthesia has recently been linked to permanent changes in brain morphology and subsequent cognitive impairment.¹³ In light of these potential adverse effects and the significant cost, it should be avoided if possible. While general anaesthesia is essential for dental treatment in some children, the HT may provide a viable alternative for many patients.

Dental anxiety and phobia is often initiated in childhood, and unrestored dental caries and dental pain are important risk factors.¹⁴ Specialist paediatric dentists frequently use sedation and general anaesthesia to avoid development of dental anxiety in young children, however these are not readily available to general dentists. The HT may reduce dental anxiety directly, by negating the need for local anaesthesia, rotary instrumentation and other potentially anxiety inducing procedures (particularly in primary care settings) and indirectly by reducing rates of major risk factors like unrestored caries and therefore dental pain.⁴

Despite the apparent benefits of the HT, it remains in most parts of the world, controversial. The randomised controlled trials (RCTs) supporting the HT have been criticised for lacking radiographic evaluation of outcomes and using adhesive restorations, such as glass ionomer and composite as controls, rather than conventional crowns, the gold standard.¹⁵ However, the evidence base for the HT is far more comprehensive than most other conventional materials, which are rarely compared against conventional crowns. In addition, the RCTs evaluate the benefits of the HT over usual practice and therefore have more clinical relevance than a comparison with a gold standard that is rarely used.⁸

A significant disadvantage of the HT remains the metallic appearance of the stainless-steel crowns. However, as with traditional stainless-steel crowns, appropriate patient selection and consent will mean most patients and families will consider these disadvantages to be not insurmountable. There are additional concerns about the whether the costs for the procedure are justifiable, as the HT represents a much simpler option for the clinician than traditional SSC. However, although the HT is minimally invasive, it still requires on careful treatment planning, clinical execution and follow-up.

More philosophical criticisms of the HT include the ethics of not removing diseased tissue, and whether similar 'non-treatment' of disease would be acceptable for medical practice.¹⁵ However, the HT is not "non-treatment" and involves careful diagnosis, treatment planning, execution and follow-up. Further, ethical dental practice requires practitioners to adhere to evidence based practice, which currently strongly supports the HT in appropriate cases. Linked closely to the scepticism regarding the HT is the at times adversarial relationship between clinical practice and clinical research and public health. However, complete

dismissal of the HT based purely on an unrealistic ideal, ignoring the crisis facing a significant minority of families is also arguably, unethical. While paediatric dentists should continue to advocate for the best oral health care for children, it is also important that we remain open to scientific evidence that may change clinical practice. As frequently emphasised by proponents of the HT, it may not be suitable for every tooth, patient and clinician. It is likely to be most beneficial in primary care settings, albeit not for all. In addition, it may also be appropriate in limited cases in specialist paediatric practice, when adopting a more holistic approach to patient management. It is difficult to justify under general anaesthesia, because many of the benefits of the HT are to avoid GA and minimise cost. Comprehensive oral rehabilitation and dental general anaesthesia remain regrettable but nevertheless essential for some children.

Finally, there are concerns about the inappropriate application of the HT and other biological approaches. The diagnosis of pulpal health is vital for the success of the HT. Placing a stainless-steel crown over an irreversibly inflamed pulp is likely to lead to infection and pain. However, there is evidence that specialist paediatric dentists are choosing to ignore the requirement for radiographic evaluation in some cases. While this may be appropriate for specialists highly trained in diagnosis and management of paediatric dental caries, similar practices in general dental practice may lead to increased failures. Critics of the HT suggest that the rapid uptake of the procedure in general practice settings will lead to a surge in odontogenic infections as a result of poor pulpal diagnosis. However, given the importance of pulpal diagnosis, guidelines for the HT emphasise the need for radiographic and clinical assessment of teeth prior to proceeding with the HT and that follow-up is essential to check for any signs of failure resulting from a misdiagnosed pulp. The importance of pulpal diagnosis and follow-up apply to any type of restoration and therefore is not a unique consideration for the HT. It is often a subjective diagnosis and therefore susceptible to error, but so are all restorations placed in general (and even specialist settings) without pulp therapy. Additionally, by retaining a greater thickness of dentine and avoiding the use of potentially irritable rotary equipment, The HT may be better for pulp vitality than conventional restorative procedures. Therefore, except in the setting of general anaesthesia, where elective pulp therapy may be performed to avoid a repeat hospital admission and general anaesthesia, the HT appears less likely to lead to pulpal pathology and infection.

The biological approach to the management of dental caries in the primary dentition is one of the most significant developments in the broad practice of paediatric dentistry. Targeted at the dynamic carious process, it enables oral health professionals to provide a more evidence-based, minimally invasive solution to moderate to advanced carious lesions. It is cost effective, less technique sensitive and better tolerated by children. It promises to dramatically improve the quality of restorative care provided in primary care/general practice settings. Despite its many advantages, the HT may be of limited use for specialist paediatric dentists who manage dentitions affected by extensive caries, often under general anaesthesia. However, as the leading clinicians in the management of dental caries in children, paediatric dentists have an important role in ensuring that all oral health professionals practice the best evidence based paediatric dentistry. As such, paediatric dentists are called to be actively involved in

research, training and development and application of guidelines for the use of the HT and other biological approaches. It is our ethical duty to respond to the needs of Australia's children in the most holistic, child and family-centred, evidence-based way possible.

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Australasian Academy of Paediatric Dentistry



International Keynote Speaker



Dr Anne O'Connell B.A., B.Dent., M.S.(U. Roch)

Anne qualified in Trinity College Dublin and worked in the UK in private practice, and in the Dublin Dental Hospital before seeking speciality training in USA. She received her Paediatric Dentistry training in the Eastman Dental Centre, New York. She has over 25 years experience, including 13 years in the USA before returning to Ireland to take up her current position in 2000.

Anne is the Academic Consultant in Paediatric Dentistry in Trinity College, Dublin and leads the only paediatric specialty training programme in Ireland. She is Past President of the Irish Society of Dentistry for Children, and is the first international member of the Scientific Affairs committee of the American Academy of Paediatric Dentistry, as well a founder member of the Paediatric research group of the International Association of Dental Research. Anne has had numerous research and clinical publications and has been awarded a number of prizes during her career, most recently in 2008 by the American Academy of Paediatric Dentistry for her work with children born small for gestational age. Anne's main interests are oral health and disease in early childhood, developmental defects of the dentition and children with special medical and dental needs.

Anne will speak about a range of topics including restorative options for teeth affected by developmental defects, tough decisions in traumatic dental injuries and dental aesthetics.

Guest Speakers

Professor Ravi Savarirayan, *Advances in genetics and precision medicine*

Dr Mihiri Silva, *Understanding genetic, environmental and epigenetic influences on child dental health*

Dr Vicki Vlaskalic, *Change more than the Occlusion, Change a Life*

Plus, welcome drinks on Friday 11th October, dinner on Saturday 12th October, the Colgate Recent Graduate Speaker Competition and back by popular demand, the Postgraduate 3MT!



Let's meet up
in Melbourne!