

BAD/DC SAS Travel Fellowship - Summer 2018

Report from the Congress of the European Society of Contact Dermatitis, Milan – Dr Glenda Hill

The 14th Congress of the European Society of Contact Dermatitis (ESCD) was held in Milan from the 18th – 20th October. It is a biennial event and my first exposure to it was at the excellent meeting held in Manchester in 2016.



The intensity of learning opportunities did not disappoint on this occasion either with breakfast sessions starting at 7.40 running through focus sessions, with 2 parallel options in each time frame, and finally the free communication sessions ending at 18.15 daily.

Having sat on the BAD annual conference organising committee as the SAS rep for several years, I am fully aware of how much organisation such an event takes. I am also acutely aware how difficult catering for such conferences can be. In the UK the committee and conference managers are beholden to the conference venues who have a monopoly on the catering. This usually, but not inevitably, leads to an overpriced 'meal deal' style lunch which the committee has no control over. Not so in Italy..... the catering was phenomenal with a fantastic selection of patisseries with coffee breaks that would shame any 'Bake off' contestant! Along with this was the option of miniature fruit salads for the calorie counters. Lunch was also outstanding with a choice of hot or cold options. We were also served a modest supply of wine. The brakes needed to be applied to avoid postprandial snoozing and disturbance of an afternoon packed with interesting lectures!

The scientific programme was full and varied and along with the lectures there were over a hundred posters to read and inwardly digest. One of these was supplied by the North Wales Specialist Registrar, Dr Urvi Popli, along with myself as a co-author. Attendance at the meeting by one of the authors was mandatory for acceptance of a poster and this provided me with a wonderful opportunity. This together with the SAS travel fellowship, awarded by the BAD, meant this meeting became a reality.



I learnt so much that it is difficult to condense it into the required word count.

Suffice it to say that “A” is not now for Apple but instead is for Acrylate!

Acrylate sensitivity has taken over from Methyisothiazolinone as the ‘must know’ issue. The problem is that it occurs in so many guises that a sensitised individual risks problems from cross reactions with Methacrylates and also from concomitant exposures to Cyanoacrylates due to tendency to be inclined towards other potentially risky cosmetic enhancements.

Many of us are already aware of the issue of Acrylate exposure with application of artificial nails, which have a huge popularity base in many European countries but especially the UK. This extends not only to the traditional acrylate false nails, which have to be constructed from the highly potent monomer via a polymerisation process, but also via the UV cured Shellac® type varnishes. Seemingly the craze has extended to self use kits in people’s homes, where they are often not as careful as professionals in dealing with any excessive monomer that can be residual following the polymerisation process. Transfer from the hands to the face is not only via the airbourne route but is also felt to be a result of another obsession, mobile phones, which are often left on the counter whilst nails are being manicured. This results in direct contact when the phone is subsequently raised to the level of the face.

It is the nail technician who is at most risk by repeated daily exposure. They often also get their own nails done to show off skills to potential customers. Pulpitis can be severe, as can nail fragility, but the reported prolonged paraesthesia of fingertips was a potential issue I had not been aware of previously.

Acrylate sensitised individuals have a high chance of issues that can pose risks to future dental work or orthopaedic prosthesis insertion, where cements containing Acrylates are used.

Hydroxyethyl methacrylate (HEMA) has been identified as a useful screening acrylate for such patients and now is in the BSCA standard series.

An issue that was highlighted in many sessions was the risk of acrylate exposure through medical devices. This includes dressings, in which they are rarely accurately labelled and often not covered by commercially available patch test allergens.

Super absorbent acrylate polymers are also used in incontinence pads and can be incompletely polymerised leaving the allergenic monomers present to sensitise individuals. When patients present with a genital rash it may not always be a contact irritant dermatitis from urine exposure.

Cyanoacrylates rarely cross react with Acrylate or Methacrylates, are present in surgical glues, and are used to fix hair extensions and eyelash extensions. In the latter scenario allergy can lead to eyelash loss, keratoconjunctivitis, corneal erosions and haemorrhage.

The medical devices discussed most frequently were glucose sensors and the insulin pumps that they are used in conjunction with. Isobornyl Acrylate (IBOA) has been identified as the culprit allergen in many brands of devices. IBOA is not available commercially to patch test against and is difficult to replace in the systems used. The level of allergenicity seems to be so great that efforts to protect the skin from direct exposure by using intervening hydrocolloid dressings do not appear to be successful.

IBOA has also been found in dental lacquers and poses a risk to clients who wish to improve the cosmesis of their teeth but also to the dental technicians. It is also present in UV cured glues used by windscreen repairers.

Another occupation at risk of acrylate allergy includes assemblers of metal parts that use anaerobic sealants such as plumbers, mechanics and opticians.

Methylisothiazolinone did not completely go without a mention but its relevance is diminishing given European legislation to restrict its use. It can still be present undeclared as a preservative to other labelled ingredients of a cosmetic such as Hyaluronic Acid in anti aging creams.

Given the trend for changing the constituents of spray paints for cars towards water based products it is found increasingly as a preservative in these circumstances also.

It has even been found in "noise putty[®]". On that theme, preservatives of historical interest, such as Parabens, have also been identified as a problem in Play-doh[®] and even in home made slime!

Other Isothiazolinones, such as Benzisothiazolinone and Octylisothiazolinone, have also come to the forefront in literature; the latter has been described in compression stockings and also as an allergen in leather settees. A new sofa dermatitis epidemic could be on the way.... watch this space!

On a completely different note I was amazed to hear that the problem with Adrenaline auto-injectors not only derives from supply issues but also that the needles are frequently not long enough to reach the muscle in an increasingly body mass index challenged population.

There were other more scientific talks that also piqued my interest.

I was fascinated to hear that the often clinically observed phenomenon of an allergenic hapten having a repeat exposure to the same site as that where the first response was elicited having a more rapid and ferocious response than to naive skin has a scientific explanation. The pool of memory T cells specific to the hapten are not seemingly homogeneous in their nature. It is the Tissue Resident memory T cells (that do not migrate to the draining Lymph node or blood, but stay resident in the tissue) that remain in a state of 'pathogen alert' and boost the immune response. They do however seemingly express a regulatory program that keeps their activity in check and aims to preserve the skin integrity where possible and avoid inappropriate chronicity of reactions-clever!

The presence of immune response determining genes means that there are antigen specific HLA subtypes that determine individual susceptibility to allergens. Epidemiological studies are ongoing in Germany with large cohorts of healthcare workers. The fact that nickel & fragrance contact allergy produces a similar clinical eczematous picture but is triggered by a different cytokine/receptor signal due to a genetically determine polarised immune response is fascinating.

We are rightly very proud of our NHS in the UK. When you attend meetings in mainland Europe it is eye-opening to see what type of service employees who are covered by work related insurance healthcare provision are able to access. The rehabilitation programme for hand dermatitis sufferers in occupational skin disease have not surprisingly demonstrated an improved quality of life for those patients who undertake their 3 weeks of intensive INPATIENT care followed by 3 weeks of outpatient treatment. This held true for varying occupations with a high incidence of allergic contact dermatitis along with irritant contact aetiologies, such as painters and hairdressers. The thought of having beds available for such cases is incredible.

Another difference that struck me was the capacity of centres in mainland Europe to arrange for detailed investigation of suspected allergens via techniques such as thin layer chromatography, HPLC & mass spectrometry via collaboration with research facilities and laboratories...something we can only dream of in rural Wales!

All in all this was an extremely worthwhile CPD event. I very much hope to get to Amsterdam in 2020.