

## **BAD Teledermatology Fellowship - Summer 2019**

### **William Hunt**

I was extremely grateful to be awarded the British Association of Dermatologists Teledermatology Fellowship. This enabled me to attend the 24<sup>th</sup> World Congress of Dermatology, held in Milan at the Milano Convention Centre – the biggest convention centre in Europe! With 6 days of proceedings and over 20 parallel sessions at times, it was a hugely informative experience. One of the biggest challenges (apart from of course attending the teledermatology symposia) was deciding which of the many gripping simultaneous sessions to join.

The conference started with an excellent opening ceremony with the Italian Philimonic orchestra followed by a lively reception including a show from colourful performers. The next day I attended the symposium on keratinocyte cancers chaired by Dr Paul Salmon, which was not only informative, but also pragmatic. Of particular relevance were the presentations on peri-operative antibiotics, the prognosis of actinic keratoses, and Dr Chrysalynne Schmult's (USA) talk that discussed newer agents in field of keratinocyte cancers such as calcipotriol and nicotinamide.

In the afternoon, I joined the dermatoscopy and teledermatology session. Highlights include talks by Dr Cory Simpson (USA) and Dr Trilokraj Tejasvi (USA). Dr Simpson's talk was on providing a teletriage and teledermatology smart phone service (store and forward) to assist with providing voluntary dermatology care to uninsured patients in the USA. The service was for both inflammatory skin conditions and skin cancer referrals; they found that it enabled more patients to be seen, waiting times reduced, and the limited capacity could be more efficiently allocated. Dr Tejasvi's presentation was on incidental melanomas identified in patients who had been referred via a store and forward teledermatology platform for suspected skin cancer and subsequently seen in person (with a full skin examination) over a 6 month period. They found that the incidental melanoma rate was 2.6% (6/232), with 8 melanomas being detected in total. Obviously, this study is based on a small dataset and despite the many benefits of a teledermatology skin cancer service, highlights one of the limitations of using teledermatology for malignant skin lesions.

The next few days whizzed by. Sessions that I found particularly enjoyable were the ethics in dermatology, which included a talk by Prof. Andrew Finlay on the ethical dilemmas in dermatology training, which raised some insightful points. Another interesting talk in the ethics session was the changing landscape of dermatology practice in the USA by Prof. Jane Grant-Kels. In particular the increasing role of private equity in the provision of US dermatology services.

In the plenary talks, of the many that peaked my interest, highlights include Prof. Jonathan Barker's update on psoriasis. Another talk by Prof. Rox Anderson (USA) on how laser and photonic technology will change dermatology was fascinating. Prof. Anderson demonstrated what the possible future holds with laser technology, and included using an Nd:Yag 1064nm laser to treat nodular BCCs in non-facial sites with patients not fit for surgery – with promising results. Additionally the role of optical coherence tomography to diagnose skin lesions was emphasised. Another mesmerising talk was by the Brazilian, Dr Gabriel Gontijo on the past, present and future of dermatologic surgery.

On the final day was the teledermatology symposium, chaired by A/Prof. Amanda Oakley (founder of Dermnet NZ). Dr Karen McKoy started the symposium with an interesting talk on the successes and failures of teledermatology in the US. Dr Tejasvi presented on the future of hospitals in 2030 and gave an entertaining, if not mind-boggling talk on the role of technology for our patients. Dr Carrie Kovarik (USA) discussed global teledermatology, and in particular her role in assisting to set up and provide a teledermatology service to countries in Africa – particularly Botswana. She highlighted the process of setting up the service. Very impressively, her dual qualification of dermatology and dermatopathology meant she would report also on pathology specimens remotely – which came with its own problems of remotely using a microscope!

Dr Saul Halpern gave an excellent talk, highlighting the role of mobile devices in dermatology. In the context of a world where mobile devices have transformed the way we live, they provide opportunities but also risks. Risks included the role of photography and consent/security issues. He kindly highlighted the BAD mobile devices guideline. In terms of opportunities, the increasing use of teledermatology apps, which will change the way we interact with patients. Many of these apps are already rolling out and active in certain parts of the UK.

A/Prof. Amanda Oakley's presentation discussed the use of teledermatology to assist with skin cancer referrals. She discussed the role of eTriage (with macroscopic and dermatologic images) to improve patient pathways and care. The downside, is of course of those patients do not receive full skin checks because of the nature of the system. A/Prof. Oakley also demonstrated a pilot AI system that is being trialled next year. The system logs particular features of the skin lesion from the short questionnaire, the GP's certainty regarding diagnosis, and analyses the macro- and dermatoscopic images to produce differential diagnoses (with percentage certainty). This would assist the GP with the decision to refer. This represents an exciting development in dermatology, which could change the entire skin cancer referral process. However, factors such as rare diagnoses, litigation, patients' consent to have an AI derived diagnosis, all need to be considered. Dr Philipp Tschandl also discussed AI in teledermatology and the challenges and possibilities. It is still early days however, the possibilities are very exciting.

The use of teledermatology in Spain was discussed by Dr David Ramirez Moreno. In Andalusia they use teledermatology for all general dermatology referrals, with most referrals able to be managed in primary care. They have a well co-ordinated system with all hospitals linked across the region, enabling the patients to be directed easily to the most appropriate clinic/hospital at the time of referral. Dr Sergeev, from Russia spoke about his initiation and development of a Russian-language international social media website for dermatologists and clinicians working in dermatology. It is used a forum for case discussion and learning – with hours of recorded lectures available.

It wasn't all work, Milan is a beautiful busy cosmopolitan city and I was able to see the magnificent cathedral, the castle, and the Galleria Vittorio Emanuele II. Furthermore, I was able to view the magnificent collection of paintings – some dating from the 15<sup>th</sup> century – at the Pinacoteca di Brera.

Overall it was an excellent experience and I look forward to the upcoming world congress of teledermatology!

