# **Professional Development** Dermatology ucd charles institute seminar series





# Advances in alopecia

Attendees at UCD's Charles Institute Seminar Series heard a presentation from Consultant Dermatologist **Dr Dmitri Wall** on advances in the research and treatment of alopecia

The Charles Institute, Ireland's national dermatology research and education centre, played host to a range of guest speakers who covered a variety of topics ranging from skin cancer to psoriasis, among others. The series, which was sponsored by RELIFE (part of the A.Menarini group), was designed to provide expert advice from a range of distinguished national and international experts in their respective fields and was chaired by Prof Desmond Tobin, Professor of Dermatological Science at UCD School of Medicine and Director of the Charles Institute of Dermatology. The seminars were broadcast to attendees with a special interest in dermatology in other locations, who accessed the talks remotely via an audio-visual link.

Attendees at the series heard a presentation from Dr Dmitri Wall, Consultant Dermatologist with a special interest in hair disorders in Hair Restoration Blackrock, who delivered a talk on the topic 'Alopecia: Current Therapeutic Options.' Introducing Dr Wall, Prof Tobin told the seminar that Dr Wall has played a key role in the development of patient registries in the past 7 years, including a global network of patient registries for alopecia areata.

Dr Wall told the attendees that hair is essential to the identity of many and hair disorders can lead to immense emotional upset and impaired quality of life. Indeed, hair loss has been reported to be "psychologically more difficult than the loss of a breast through breast cancer" in some women and consistently ranks amongst the most troublesome of chemotherapy side-effects.<sup>1-3</sup>

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the world and particularly in Ireland." He provided the attendees with an overview of the different types of alopecia that commonly present in clinical practice. He acknowledged that there has been a deficit in high-quality evidence in therapeutics though stressed that there is considerable effort being devoted globally to address this.

#### **Emotional burden**

Dr Wall summarised the currently-available evidence and presented the attendees with

case studies to illustrate typical presentations of alopecia and treatment approaches, as well as emerging therapeutic options. He also synopsised his work in Australia during a hair fellowship with Professor Rod Sinclair in Melbourne and emphasised the value of providing a specialised clinic for patients suffering with hair-related disorders. He particularly noted the benefit of a multidisciplinary approach that addresses the emotional burden of alopecia, alongside provision of high-quality information and therapeutics.

In hair loss generally, Dr Wall encouraged attendees to be well versed on potential side-effects before prescribing a course of medication for alopecia to ensure that safety is paramount in the search for effective treatments. He also stressed the need to be familiar with emerging and topical technologies, such as low-level laser light, platelet rich plasma and stem-cell technology, to be able to help patients recognise the difference between claimed and realistic benefits.

Dr Wall outlined the role of hair transplantation in both men and women, highlighting how appropriate medical and surgical options are not necessarily exclusive and can work in harmony to address different aspects of alopecia to produce a better outcome. While medication can slow hair loss and diffusely increase hair density, transplantation can address a more focal area of hair thinning.

# Sunscreen and alopecia

Dr Wall also explored a current controversy regarding the potential association between the scarring alopecia, frontal fibrosing alopecia and chronic use of sunscreen containing products. He explained that there has been a marked increase in the incidence of this condition, that typically presents with recession of the frontal hairline, along with redness and scaling around the hair follicles, atrophy of the surrounding skin and often, a sensation of itch or burning.

A number of factors have been linked to the condition, including immune dysfunction, genetic predisposition and sex hormone exposure. Some among the dermatology community have questioned whether aspects of frontal fibrosing alopecia could be also be attributed to the use of leave-on sunscreen containing products, noting a vast majority of patients with the condition report a long history of use of such products, while cases have been reported of cessation of progression with omission of application of such products to the forehead.

It has been theorised that, as a person ages, glands on the forehead become thinner, enabling a greater degree of absorption of SpF-containing products, which disrupt endocrine functions, resulting in immune-mediated destruction of hair follicles.

During a lively Q&A session, Prof Tobin pointed out that there is a wide range of hair disorders, some of which are reversible, and some of which result in scarring, as well as those that can be life-long in nature. Hair growth is a uniquely mammalian trait and is "hard-wired into neuro-immuno-endocrine axes, so it can be difficult to get hair to grow, or prevent it from growing, when required," said Prof Tobin. "Given that fact, and that for many individuals hair growth



### Dr Dmitri Wall

may be viewed as cosmetic rather than in the context of a pathology — even in dermatology — how much should clinicians invest in efforts that could, systemically at least, impact on all body organs in the long term?"

Dr Wall noted the significant lengths that some patients will go to seek effective treatment because of the emotional upset their alopecia generates. They may seek multiple opinions from multiple professions, often spending large amounts of money on treatment that promises results without good evidence to support them. While he identified the need to have thorough and honest conversations with patients about what is known and not known, risks versus benefits and side-effects, it is also important to offer and develop reasonable therapeutic options to help reduce the significant impact on their quality of life.

Speaking to the *Medical Independent* (*MI*) following his presentation, Dr Wall elaborated on this, saying: "In my experience, it means a lot to patients when you acknowledge just how significantly hair loss impacts them on a daily basis." Though he stressed the need to identify this, he also identified the difficulty in doing so in an already overstressed and under-resourced general practice setting.

Dr Wall also highlighted the role of patient registries, which he has been involved in developing, in assessing the long-term effectiveness and safety of real-world therapies that clinical trials don't have the power to reveal. He highlighted current work in the area of alopecia areata to develop a global network of registries at a time when promising new therapeutics are emerging. He also identified the capacity of patient registries to enable communities to work together to build and share experience and expertise.

Speaking to *MI*, Dr Wall, who also completed a Masters degree in health informat-

ics at Trinity College Dublin, expanded on his work in this area. This involved a further two-year fellowship with the Irish Skin Foundation with Professors Alan Irvine and Eoin O'Brien to establish whether there was a need to develop dermatology patient registries in Ireland. After identifying a need existed, following national and international, multi-stakeholder consultation, a plan was developed to build these registries to an international standard and create the networks required to implement and sustain them. The project has continued over the years and, after developing registries in a number of disease areas, has now resulted in the development of a not-for-profit company that aims to share this knowledge to create high-quality, sustainable patient registries for the Irish and international Dermatology community.

"It is hoped that this will enable the Irish community to innovate and give patients and clinicians access to technology that is better able to capture real-world data. This aims to give patients the opportunity to ensure that the information they give on a daily basis is used to improve their care," said Dr Wall.

## References

- 1 Hunt N, McHale S. The psychological impact of alopecia. BMJ: British Medical Journal 2005; 331: 951-3.
- 2 Freedman TG. Social and cultural dimensions of hair loss in women treated for breast
- cancer. Cancer nursing 1994; 17: 334-41.
  3 Lemieux J, Maunsell E, Provencher L.
  Chemotherapy-induced alopecia and effects on quality of life among women with breast cancer: a literature review.

Psycho-oncology 2008; 17: 317.

RELIFE has had no input into the content of this article or series of seminars