

BSDS Surgical Fellowship

The All India Institute of Medical Sciences (AIIMS) is one of India's foremost medical research institutions and was the perfect choice to further my interest in vitiligo surgery. I arranged to visit Dr. Somesh Gupta¹ in New Delhi, India. The summer heat of Delhi, was blistering (46°C) but luckily the hospital was centrally air conditioned. There were always a range of clinics to choose from, with 30 – 40 patients per clinician. On my first day I saw conditions that I had never seen, such as: leprosy, chromoblastomycosis, multicentric histiocytosis and juvenile dermatomyositis.

At least ten vitiligo patients were seen in each general clinic. The initial management was similar to that of the UK, starting with steroids and PUVA. If this failed and the patches of vitiligo were localised then surgical options were preferred. These ranged from punch and blister grafting to follicular unit stem transplantation².

The results are variable, but patient feedback was very positive. Psychologically the impact of vitiligo is immense within the population, for this reason aggressive management is undertaken. Interestingly, everyone with leprosy and vitiligo are referred to an in-house psychological counsellor, which is rare resource in the UK.

During my time at AIIMS, on behalf of Cardiff University School of Pharmacy, Microneedle Team, we discussed the engineering of microneedles for use in vitiligo surgery. A pre-clinical proof of concept study is due to start in September this year at Cardiff. In the future we hope to set up a collaboration with AIIMS in order to further develop this concept.

Surgical pearls:

Whilst the surgery in vitiligo is technically possible by dermatological surgeons in the UK, the art is choosing the right patient, who has truly stable vitiligo.

The obvious problem with all vitiligo surgery is the need to dermabrade the recipient site and obtain cells from a donor site, both causing trauma. Any treatment that could bypass the trauma of dermabrasion is clearly the future, and the subject of further work with Cardiff University.

This was a productive trip, not only did I learn some of the techniques of vitiligo surgery, I also managed to make some friends and hopefully collaborate in the future for the benefit of vitiligo patients.

Impact for the UK

It is clear that very few places in the British NHS healthcare system, offer surgical management of vitiligo. This is a difficult condition for patients to live with and impacts on quality of life. It is shame that in the UK only 1 in 8 people may obtain advice from a dermatologist and that over 50% of patients are moderately or severely affected by their vitiligo.³

I am very grateful to the BSDS for this generous travel fellowship, it has allowed a greater empathy for patients with vitiligo and highlighted the huge difference in how vitiligo is perceived by different healthcare systems. I am of course also very grateful to Dr. Somesh Gupta and Professor V K Sharma for allowing me integrate so easily within their department.

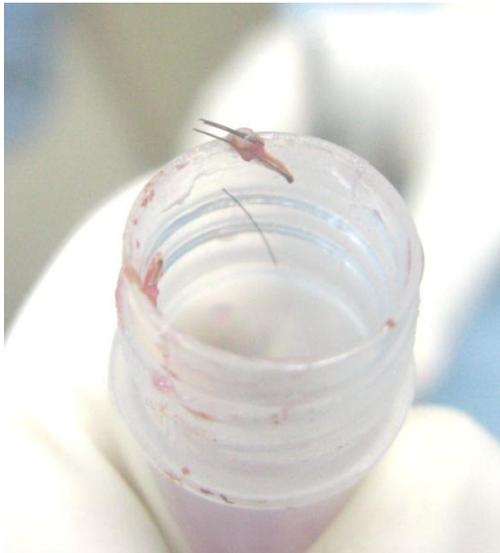
1) Gupta, S et al. (2006). *Surgical Management of Vitiligo*. London: Wiley-Blackwell.

2) Mohanty S, Kumar A, Dhawan J, Sreenivas V, Gupta S. Noncultured extracted hair follicle outer root sheath cell suspension for transplantation in vitiligo. Br J Dermatol. 2011 ; 164: 1241-6.

3) Talsania N, Lamb B, Bewley A. Vitiligo is more than skin deep: a survey of members of the Vitiligo Society. Clin Exp Dermatol. 2010; 35: 736-9.



Chromoblastomycosis



The follicular unit, prior to trypsinisation and cell grafting



Blister grafting formation prior to transplantation



Dev Shah (right)

Dr. Somesh Gupta (left) and Dr.