

Fellowship Report: Lachlan McNeill Scholarship, 2007

**Non Penetrating Glaucoma Surgery including Optonol Implants Fellowship, Jules Gonin Ophthalmic Hospital, Lausanne, Switzerland**

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**Objective:** To gain knowledge and experience in non Penetrating Glaucoma Surgery including Optonol Implants

**Location:** Jules Gonin Ophthalmic Hospital, Lausanne, Switzerland

**Duration:** 4 Weeks

**Consultants:** Prof Andre Mermoud and Dr Emilie Ravinet

**Introduction:**

I started my specialist registrar training in the West of Scotland deanery in January, 2006. One of my first subspecialty training was in Glaucoma during which I was able to perform trabeculectomy which is one of the commonest Glaucoma Surgery performed worldwide. Two recently developed approaches, deep sclerectomy devised by Andre Mermoud and viscocanalostomy, devised by Robert Stegmann, have been increasing in popularity among glaucoma surgeons. So I went to get the first hand experience in deep sclerectomy and use of optonol implants in Lausanne.

**The Hospital:**

The Jules Gonin Ophthalmic Hospital is the largest eye hospital in Switzerland, situated in the beautiful city of Lausanne alongside the Lake Geneva and is the second largest after Moorfields as a fully dedicated eye hospital in Europe. The hospital has a polyclinic which is fully equipped with all the latest Gadgets. The emergency department open to the public 24 hours has 26 inpatients beds for adults and 7 beds for Children. It has a newly built and renovated operating theatre complex with four theatres working simultaneously. Every surgery is recorded for teaching purpose. A fully equipped research laboratory performing experiment in nearly all subspecialty. Its operation is reinforced by various structures annexes such as histopathology laboratory, the eye imaging center, the unit of rehabilitation and low-vision and the social service. The

library has all international journals and all the recent books dealing with the oldest ophthalmology literature.

The hospital serves a population of more than 7, 00,000 but more importantly patients are referred from other parts of the country as well as neighbouring countries including France and Germany. The activity of this package can be summed up in a few figures: more than 54,000 outpatient's visits and nearly 5000 surgeries a year, an internationally recognized scientific research. Hospital Jules Gonin is one of the services of Ophthalmology best performers in Europe. Jules Gonin Hospital is the University of Ophthalmology whose structure depends on the medical faculty of medicine at the University of Lausanne. In this context, the role of education, both for students, young doctors in training, ophthalmologists installed as for paramedical staff is of great importance.

### **The Team:**

Prof Andre Mermoud was the head of the Glaucoma unit until recently he moved to private practice and his position was taken by Dr Emilie Ravinet. There is one associate specialist with two assistant specialist and two trainee residents.

The largest numbers of Glaucoma operations are performed by Prof Mermoud and Dr Ravinet at Jules Gonin in Switzerland. The most common technique is Deep Sclerectomy and its various modification including optonol implants. Both adult and pediatric glaucoma operations are performed in this unit and it is the tertiary referral centre for all complicated cases.

### **A typical day in Jules Gonin Ophthalmic Hospital and Montchoisi Clinic**

On a typical day in Jules Gonin the theatres used to start at 8 AM in the morning. A half a day list consists of 3-4 deep sclerectomy with or without phacoemulsification in addition to 2 cataract surgery. I used to assist in all the cases. All the cases were done under retrobulbar anesthesia with propofol. I was free to ask any question through out the procedure and the consultant tried to give me the best possible answers to clear my queries. I followed all the cases post operatively and did immediate post operative management as well as observed Goniopuncture. During my stay I assisted in nearly 50 cases of deep sclerectomy with or without phacoemulsification and 3 cases of optonol implant. Both the processes were quite similar. I was actively involved in preoperative assessment also. In the clinic I used to see both new and old patient mainly complicated cases as it was a tertiary referral centre.

### **Workshops and Publications:**

I was fortunate to attend a workshop organized by Glaucoma Group of the Swiss Society of Ophthalmology (SSO) held in Bern on 30<sup>th</sup> November, 2007. The meeting was mainly workshop based case discussion which was very interesting and educative. It was my

pleasure to hear a lecture from renowned glaucoma specialist like Prof Robert Fechtner from New Jersey, USA. He gave a lecture about secrets of Glaucoma surgery.

During my stay with Prof Mermoud I manage to write a letter to the editor regarding Non penetrating glaucoma surgery and optonol implants.

### **Conclusion:**

Before going for this fellowship I was very skeptical about non penetrating glaucoma surgery and the literature search done by myself was not very much in favor of deep sclerectomy in comparison to trabeculectomy. By looking at the procedure and assisting in the surgery and getting the first hand experience of the postoperative results I am now very much enthusiastic about the procedure. I am looking forward to presenting my case in front of the large audience in spring symposium. I am aware this procedure has not been widely accepted all over the world and in UK very few centers do this surgery and none in Scotland. Although undoubtedly the procedure has got a steep learning curve but it has got definite advantages in some patients needing glaucoma surgery. So a proper training and experience is required to perform in Scotland in appropriate patients.

The clinical and surgical experiences have proved invaluable to my Glaucoma subspecialty training and I would have no hesitation in recommending this experience to anyone who has interest in Glaucoma surgery. As well as fantastic centre for learning, the colleagues in the unit were a pleasure to work with, and I felt proud to be part of their team.

In summary I hope I manage to utilize the scholarship granted to me in the best possible way. But I would like to highlight the effectiveness of the procedure and succeed in bringing this to Scotland and thus fulfill the very purpose of this scholarship.

### **Acknowledgement:**

In the end I would like to thank Prof Andre Mermoud and Dr Ravinet and their team and for all there help. I am grateful to all the members of the committee who agreed to give this scholarship to me and to Mrs. McNeill for her generosity in funding this scholarship. My sincere thanks to all staffs associated with Lachlan McNeill Scholarship in the College. I thank to all my consultants who showed their faith in me. Lastly I thank to my family for their support and my friend Mrs. Ranu Chakraborty for her technical help.



**Prof Andre Mermoud and Dr Pankaj Agarwal in Montchoisi Clinic**



**Dr Emilie Ravinet and Dr Pankaj Agarwal in Jules Gonin Hospital**



**Busy doing deep sclerectomy**