

ELECTIVE (SSC5c) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

What are the main reasons for presentation to the plastic surgery department in at St George's Hospital in South West London and how does this differ to other parts of London and the UK?

Most presentations to the plastic surgery team involved hand trauma including lacerations and fractures. Nail bed injuries were relatively common. A number of infections also presented. Differing to other units in London and the UK, facial lacerations, were treated by plastic surgery, in my experience other units in London and UK have facial lacerations managed by the Maxillofacial Surgery team or a mixture of both teams.

How are skin cancer services organised and delivered in St George's Hospital and how does this differ to the rest of London and the UK?

St George's Hospital provides diagnosis, surgery and chemotherapy for all types of cancer as well as palliative care and follow-up clinics, which is similar to other hospitals in London and the UK. Similarly, cancer prevention screening services and treatment for pre-cancer stages is also available. Radiotherapy for patients is provided at the Royal Marsden Hospital with which St George's Hospital is a Joint Cancer Centre. Uniquely, St George's Hospital has the only dedicated skin cancer and melanoma service in the country. It works via a Hub and spoke type of service, where referrals from a wide catchment area as far as Sussex and Hampshire are received. Skin cancer services are categorised into Melanoma/rare skin cancers/sarcomas and non-melanoma cancers. Unlike some other Hospitals in London and the UK, two consultants and an associate specialist solely care for melanoma and skin cancer cases. This is due to the very large amount of skin cancer cases. Support for this service is provided by other health professionals such as dermatologists, skin cancer CNS's, surgical teams in neurosurgery, cardiothoracic, Gastrointestinal and vascular surgery. In contrast to some other units in London and the UK, children with melanoma type lesions may also be managed. A preventative approach of the skin cancer service delivers educational awareness through talks and other such activities. Of note, St Georges is a leading centre in delivering sentinel lymph node biopsy for malignant melanoma.

MDT(melanoma & non-melanoma)

The skin cancer and melanoma multidisciplinary team (MDT) includes plastic surgeons, radiologists, clinical and medical oncologists, clinical nurse specialists, a pathologist and a histopathologist. Meetings are held every thursday morning. The MDT discusses all patients with a confirmed or suspected cancer diagnosis. The team approach ensures all treatment options are considered and patients receive the best care. When multidisciplinary teams include specialists from other hospitals (Cobham and Queen Mary's), they contribute to the meeting using a video-link.

The clinical nurse specialist acts as a key point of contact (key worker) for a patient and their family. Individuals will get their key worker's contact details at the point where cancer is suspected or diagnosed.

What is the initial management structure for patients presenting with Skin cancers?

Initially patients are referred usually via a GP under a two week rule and seen on a weekly screening clinic. Routine referrals are screened by a consultant, and if felt to be a suspicious lesion, referred onto a screening clinic. If suitable, a local anaesthetic biopsy service is available. If not, patients may be placed onto a day surgery list. Non-suspicious lesions are treated via reassurance, with patients given mole check and sun protection advice. Occasionally, a photograph is provided to the patient and for their notes for monitoring, where the patient may return should they note any changes occur. All suspicious lesions are managed via biopsy (incisional or excisional), with a follow up appointment for results. A discussion at the following MDT enables a treatment plan to be planned for biopsy proven cancerous lesions. Benign results are managed via reassurance. A melanoma clinic takes place on Friday mornings, with non-melanoma skin cancers seen on alternate Thursdays on the plastic surgery, radiotherapy and dermatology clinic (PRD). Following diagnosis and staging of skin cancers, depending on the type treatment may include; wide local excision, lymphoscintigraphy, sentinel node biopsy, lymph node dissection, debulking, isolated limb infusion, microvascular reconstruction.

Gain further clinical and surgical experience in the field of plastic Surgery.

My main aims during my time at St George's Hospital were to explore more aspects of the scope of plastic surgery, but with my main focus being to experience as many cases in the management of skin cancer and particularly malignant melanoma. During my time I was fortunate to be attached to Professor Powell as my main consultant and Miss Odili, who are the consultants involved in malignant melanoma skin cancer cases within the unit. My experience of sentinel lymph node biopsy was very limited prior to my four week placement, so it was important to me to better understand malignant melanoma and the role of sentinel node biopsy in its management.

Malignant melanoma is a tumour of melanocytes and is the fifth most common cancer in the United Kingdom. Over the past few decades there has been an increase in cases in men and women. Diagnosis of melanoma is made by first assessing a pigmented lesion using the usual ABCDE approach used for all skin lesions, with definitive diagnosis made via a wide local excisional biopsy. During my time in the unit it was made apparent to me that prognostic factors important to melanomas are Breslow thickness, mitotic rate, presence of ulceration and metastasis. Currently the American Joint Committee on Cancer (AJCC) staging system is used to stage disease. On clinics, this staging system is an important tool which aids in the counselling of patients and treatment planning.

I found my theatre sessions invaluable to better understand the practical aspects of melanoma management. All patients with biopsy proven melanoma who requested sentinel lymph node biopsy underwent lymphoscintigraphy investigation in the morning which was used to identify sentinel lymph nodes on imaging. Sentinel lymph nodes being the first lymph nodes that drain a region, where cancer cells are thought to metastasize to from the site of a primary tumour. A skin marking is then placed for the surgeon to be able to identify the rough position of the node. In theatre a patent blue dye is injected into the scar area from previous melanoma excision, which spreads into the lymphatics and in theory would enable the identification of sentinel nodes with a blue appearance. Pre and post-op recordings of the radiotracer are recorded for each node identified. Documentation of whether the nodes are hot, blue and its depth are noted. Additionally the basin radiotracer recording is taken before closure. The Breslow thickness dictates the margins of the further wide local excision with recommendations followed according to the AJCC.

Other experiences during my time in the unit involved two days spent on call with the Plastics SHO. I observed interesting hand trauma cases, with nail bed injuries and metacarpal fractures. Friday mornings were spent assisting the F1/SHO on the minor procedures biopsy clinic, and Friday afternoons in teaching, which was run by Mr Colville.