# Introduction

Basal cell carcinoma (BCC) is a form of skin cancer and is one of the most common cancers found in humans, it has diverse clinical appearances and morphology. BCCs are usually slow growing tumours that rarely spread to distant parts of the body, growth of BCC is usually localized to the area of origin; however some BCCs can infiltrate tissues in a three dimensional fashion that may not be obvious on visual inspection and if left untreated or inadequately treated it can cause extensive destruction of tissue particularly on the face. The clinical course of BCC is unpredictable; it may remain small for years or it may grow rapidly or proceed by successive spurts of extension of tumor and partial regression ***(Fiona et al., 2004).***

The tumor may occur at any age but incidence of BCC increases markedly after age of 40 and the incidence in younger people are increasing possibly as a result of increased sun exposure. The majority of BCCs appear on the head and neck region and the nose is the most common site. BCC is rarely found on the back of hands although it receives a significant amount of solar radiation ***(Samhar et al., 2007).***

Some of the risk factors are exposure to ultraviolet radiation, skin type 1, a positive family history of skin cancer and several genetic conditions ***(Wong et al., 2003).***

Diagnosis of basal cell carcinoma is clinical and confirmed by tissue biopsy, sometimes imaging studies are needed for advanced tumors when there is question of invasion or involvement of underlying soft tissue or bone as CT scanning with bone windows which is the imaging study of choice, As incidence of nodal metastasis is very low, evaluation of the neck is not essential For early BCC, clinical examination suffices to determine extent of lesion ***(Sober, 1983).***

There are several treatment modalities of facial basal cell carcinoma the most efficient one is the surgical excision with sufficient safety margin so the tumour is excised together with a variable margin of clinically normal surrounding tissue ***(Telfer et al., 2008).***

Surgical excision is a highly effective treatment for primary BCC. The size of the peripheral and deep surgical margins should correlate with the likelihood that subclinical tumour extensions exist ***(Walker and Hill 2006).***

The concept of a “surgical margin” is central to the treatment of cutaneous malignancies. The surgical margin must be differentiated from the “clinical margin,” which refers to the visible edge of the tumor. Indeed, the two are intimately related ***(Norman et al., 2009).***

However the surgical management varies according to the size, site and the subtype of the tumor so the reconstructive options are determined by the extent of the defect as excison of the lesion can result in large complex soft tissue and bone defects with exentration of the orbit and

intracranial exposure which require immediate skeletal reconstruction with autogenous calvarial bone grafts supplemented by metallic mesh ***(McCombe et al., 2002).***

Reconstruction of facial defects is a challenging endeavor. Successful reconstruction requires a thorough understanding of skin anatomy and physiology, careful analysis of the defect, thoughtful consideration of multiple options for donor tissue, and skillful and meticulous soft tissue–handling techniques ***(Brian et al., 2008).***

However, any decision about management should be holistic and take into account other factors such as the occupational circumstances of the patient and likely period of time off work, co-morbidity, likelihood of success, donor morbidity, functional outcome and the risks of surgery and anesthesia. Reconstructive surgeons use the concept of a "Reconstructive ladder" the more problematic the wound, the higher up the ladder the surgeon has to climb. Simple wounds may be closed by primary suturing sometimes in the primary care setting but others may require complex reconstruction including free tissue transfer ***(Boyce and Shokrollahi 2006).***

Options for the repair of facial skin defects include healing by secondary intention, primary closure, skin grafts, local and regional flaps and free tissue transfer ***(Aaron et al., 2008).***

Skin grafts are classified as either split-thickness (STSG) or full-thickness (FTSG) depending on the amount of dermis included. Split-thickness skin graft contains varying amounts of dermis, whereas a FTSG contains the entire dermis ***(Thorne, 2007).***

A skin flap is a segment of skin and subcutaneous tissue that is transferred from one area to another area of the body while remaining temporarily or permanently attached to its donor site for its vascular supply ***(Aaron et al., 2008).***

The decision as to which method to employ in any given case should arise from the general health of the patient, the characteristics of the defect and the patient's own expectations and desires. In other words, the repair should fit the patient and his or her defect ***(Aaron et al., 2008).***