

Editorial

A Short View to Craniofacial Biopsy

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“Biopsy” as the name implies it is the process of removing a sample of living tissue and examining tissue for any pathology [1]. X-rays helps only to identify and locate the lesion and it can never disclose the severity of lesion. Biopsy is an investigative procedure for proper diagnosis and determining the severity.

Indication for biopsy includes non healing ulcers, hyperkeratotic lesions, lesion that persist more than 2 weeks [2], lesion that does not responds to local treatment upto 10 to 14 days. Contraindication includes pyogenic infections, in vascular lesions which may lead to intensive bleeding, Seriously ill patients those has risk of secondary complication [3], it is not preferred in multiple neurofibroma cases [4] which shows malignant transformation. Term biopsy-medical terminology is named in 1879 by Ernest Besnier [4]. First biopsy was done in Russia in 1875 by M.M.Rudnev [5].

Types of biopsy

Exisional biopsy: Exisional biopsy is performed for small mucosal lesions less than 2cm [6]. Total exision of lesion is done along with surrounding normal marginal tissue [7]. An elliptical incision is done by placing by blade angled towards centre of lesion and surgical site is closed with suture. Small lesions ,pedunculated and small exophytic mass are indicated for exisional biopsy

Incisional biopsy: Incisional biopsy is done by taking a representative sample from large lesions. Collected sample is in wedge shape and also care must be given to collect most affected area. An elliptical incision is made with size 15 scapel blade. [8]. Incision must be deep to underlying connective tissue to the level of muscle or bone.

Punch biopsy: It is a type of traditional incisional biopsy [9]. Most preferable site for punch biopsy are lateral boader of tongue and buccal mucosa. Mucosal surface can approach perpendicularly by device [sharpened hollow tube]. Punch is placed over lesion and applying downward and twisting motion until underlying bone or muscle reached and this removes a core of tissue can be easily retrieved using curved scissors. This type of biopsy is not indicated for vesiculobulous lesion, because twisting motion would detach the epithelium detachment can lead to the difficulty in diagnosis because interface between epithelium and connective tissue is necessary for subclassification of such lesion [8].

Electrosurgery and laser techniques: These techniques

are beneficial for patients because it may produce less bleeding [haemostasis] and decrease patient discomfort. But demerit behind these procedure are they cause thermal artifact in boader of lesion so that 0.5mm margin should be maintain [8].

Fine needle aspiration: Biopsy Fine needle aspiration biopsy was introduced in 1930 by Martin, Ellis and Steward [10]. This procedure is mainly applicable in head and neck region, major salivary gland. Main advantage for FNAB is lower risk of infection and also has less tissue and vital structure damage. FNAB can be used for palpable masses and in lesion which is difficult to access .it is not applicable for fixed lesion because it is difficult to perform movement .Intially needle is inserted in to lesion and a vaccum applied. Operator made back and forth movement with needle. Thus collection of cells obtain in needle for preparation of smear .The pressure was then released and needle removed from the lesion .FNAB is performed with franzen pistol comprise of 20 ml syringe with 23-25 gauge needle. Tissue material collected in the needle is placed into glass slide.

Preparation of biopsy specimen

Sectioning of specimen is done with a fresh scalpel into small pieces, size may be not extend more than .5cm in diameter, care must be given not to disinfect specimen with iodine containing antiseptics. It may be permanently stain tissue. Immediately transfer specimen into fixative solution. Most commonly used fixative is 10% formalin. certain special medias such as Michel's solutionis used for immunofluorescence procedure [11].

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