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A RETROSPECTIVE ANALYSIS TO STUDY THE INDICATIONS FOR PERFORMING SKIN BIOPSY.

Dr Punit Pratap

Assistant Professor, Department of Dermatology, F H Medical College, Tundla, Firozabad

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Corresponding author: Dr Punit Pratap
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Abstract

Background: Skin biopsy serves as an essential tool for diagnosing skin lesions, especially for differential diagnosis and difficult-to-diagnose clinical imaging. Few studies have been conducted to determine the indications for which skin biopsies are routinely performed. Therefore, we conducted this survey.

Methods: The biopsy application was reviewed over the years (June 2020-June 2021) to assess the indications for which a biopsy was performed. Statistics are expressed numerically and as a percentage.

Results: In this study, 93 consecutive skin biopsy applications were reviewed for skin biopsy indications. In this study, skin biopsies were performed primarily for granulomatosis and spongiform encephalopathy with psoriasis. Incision biopsy was the most commonly used technique in our study, followed by excision and stroke biopsy.

Conclusions: This study determined the general indications for which a skin biopsy was performed.

Keywords: skin biopsies, evaluation, factual information

Introduction

Managing skin diseases requires proper diagnosis, which often constitutes a complex process. Skin biopsy is an established diagnostic procedure that combines medical diagnostic procedures with something hidden in the microscopic area of skin pathology [1]. Given the potential and limitations of light microscopy, and the symptoms of performing invasive techniques, dermatologists often rely on skin biopsies to enhance their diagnostic abilities [2]. There are several types of skin biopsy techniques, including incision biopsy, excise biopsy, and punch biopsy. Hematoxylin and eosin staining is routinely performed on skin biopsy specimens prior to histopathological examination [3, 4]. If necessary, special staining, direct immuno-fluorescence, and immunohistochemistry are required. We did research to diagnose skin diseases associated with skin biopsy.

Methods

A biopsy application form (June 2020-June 2021) was reviewed to assess the indications for which the biopsy was performed. All biopsies performed during the study at the Tertiary Care Hospital were included in the study. Forms of biopsy for which no diagnostic or differential diagnosis was mentioned were excluded from the study. Statistical were expressed as numbers and percentages.

Results

In this study, 93 consecutive biopsy application forms were reviewed for the above details. No one was excluded as all forms were included in the study and all forms of biopsy application included assessment or differentiation assessment. (Table 1) shows the indications for which the biopsy was performed. Table 1 shows that the biopsy was usually performed in descending order for the following disorders: sponge disorders, granulomatous disorders, psoriasis disorders, benign tumors, nevus and nevus disorders, vasculitis disorders, nevus disorders and Blues Blues Disorders.

In spongy dermatitis, the biopsy was usually performed in the following cases: atopic dermatitis, seborrheic dermatitis, allergic contact dermatitis, photorealgic dermatitis, erythema, aerial. Contact dermatitis, eczema PMLE. Atopic dermatitis forms the largest number of bipedal sponge dermatitis (n = 19). In granulomatous diseases, leprosy was a common indication for biopsy. Biopsy was performed in suspected cases before and after the onset of MDT to assess the effectiveness of treatment in leprosy patients. Table 2 shows the types of biopsy procedures performed on a patient. If the diagnosis was suspected, a biopsy was performed on a small wound, and in the case of disorders such as epidermoid cysts and lipomas, resected samples were regularly sent for histopathological confirmation. The study also required special staining, immunohistochemistry and DIF for related matters. Especially for cases of leprosy in which fight staining was used. In the case of autoimmune blisters and vascular disorders, direct immuno-fluorescence was required. Immunohistochemistry was needed when catenary lymphoma was suspected.

Table 1: Skin biopsies performed for different markers

Dermatologic disorder	Number of biopsies
Psoriasiform disorders	11
Lichenoid disorders	8
Granulomatous disorders	14
Vasculitic disorders	8
Spongiotic disorders	19
Vesiculobullous disorders	6
Deposition disorders	1
Nevus and nevoid disorders	6
Benign tumors	9
Cutaneous malignancies	1
Others	10
Total	93

Table 2: Biopsy procedures performed

Types of biopsy procedures	Number of biopsies
Incisional biopsy	69
Excisional biopsy	15
Punch biopsy	9

Discussion

Skin biopsy is easy and economical tool for dermatologists' diagnostic tools. It not only solves the diagnostic dilemma, but also helps diagnose abnormalities if a particular illness is not diagnosed. Many studies emphasize the fact that histopathological diagnosis is the gold standard for confirming skin diseases [3]. Successful histopathological reporting depends on choosing the right biopsy technique, choosing the ideal location for the biopsy, providing the medical information needed for the biopsy application, proper sample processing, comprehensive reporting, and identification. It depends on many factors, such as scratches. Immunohistochemistry with prerequisites or DIF [4-6]. In this study, skin biopsies were performed primarily for bovine encephalopathy, followed by granulomatous and psoriasis. In a study by Korfitis et al, the incidence of skin disorders was higher in Westerners, so biopsies were usually performed to rule out skin lesions [7]. Skin biopsy techniques play an important role in the success of skin pathological reporting [8]. The location of the biopsy and the suitability of the sample are important factors. Incision biopsy was the most commonly used technique in our study, followed by excision and punch biopsy [9]. This is in contrast to other studies where punch biopsy is the most commonly used biopsy technique [10]. Diagnostic accuracy can be improved by additional studies such as immunohistochemistry and direct immunofluorescence [11]. It has also been observed that providing the necessary details on the biopsy application plays an important role in improving the accuracy of skin biopsy diagnosis [12].

Conclusion

This study shows that it indicates the need for a skin biopsy. It was observed that spongiotic, granulomatous and psoriasis disorders are general indications for which a skin biopsy was performed at our center. We did this study because the studies done in this area is less as compared to other.

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