Dysplastic Nevus of lower eyelid: A Case report

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Abstract
Dysplastic nevus share common features between melanomas and common nevus (CN), and hence histological investigation is the widely used method for its diagnosis. Dysplastic nevus should be monitored carefully due to increased risk of its transformation to melanomas. A case of dysplastic nevus of the left eye lower lid is being reported in the present paper. A 35 year old man with painless mole in the left lower lid since the five years which has gradually increased in size was examined.

Keywords: Dysplastic Nevus, melanomas, common Nevus, histopathology

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Introduction
A Dysplastic nevus (DN) or atypical mole is a mole whose appearance is usually different from that of common moles as they appear slightly darker than the common moles. Dysplastic nevus often grow to larger than ordinary moles, and may have irregular and indistinct borders. In 1992, the NIH recommended to stop using the term atypical moles and coined them as dysplastic nevus [1]. The most common cause of DN is hereditary but excessive exposure to sun may also contribute to a small part of cases. Patients with DN should undergo a complete cutaneous examination. Several studies have shown that regular cutaneous examinations combined with baseline and serial color photographs of the patient's cutaneous surface ultimately decrease biopsies and lead to earlier diagnoses of melanoma [1a]. Even though various medications are available for treatment of DN, excision or surgery is the treatment of choice for these lesions.

Case Report
A 35 year old man was reported to our department with a painless mole in the left eye lower lid since 5 years. Patient was healthy, when he noticed a small black lesion in the left side lower eyelid which was painless in nature and has gradually increased in size he reported to the department. Thorough counseling revealed that the patient has no positive family history for any types of malignancies.

Examination
Lower eyelid
A 3mm x 3mm lesion was seen on the lateral 2/3rd and medial 1/3rd of lower lid of the left eye touching the inferior limbus.

Figure-1: Photograph depicting Dysplastic nevus

The lesion was painless and was firm on consistency (figure-1). Meibomian glands tear film and eyelashes appeared to be normal. Anterior and posterior segment examination was normal. Extra ocular movements were present in all directions. Patient was advised excision followed by histopathology of the excised sample.

Figure-2: Histopathological report confirming Dysplastic nevus

Operative Findings
Patient was given with local lower lid anesthesia using 2% lignocaine with adrenaline. Using an 11 number blade, a Y incision was made and the nevus was removed after undermining it completely and sent for histopathology. An absorbable 6 0 Vicryl suture was used to suture the lid and the tarsal
Dysplastic Nevus of lower eyelid: A Case report

plate. Antibiotic ointment was applied and dressing was done. **Histopathology** Report was suggestive of dysplastic nevus (figure-2). Patient was followed up for three months, (day 1 (figure-3), and 3 months (figure-4)) to see for any regression.

**Figure-3: Post-operative picture at day-1**

**Figure-4: Post-operative picture at day-90**

**Discussion**

Dysplastic nevus (DN) are acquired pigmented melanocytic lesions of the skin with distinct histological and clinical features. They are considered important because of their potential to turn into melanomas [1,2]. Dysplastic nevi can occur anywhere on the body and the most common places include trunk, upper back of men and women and scalp and forehead of children. The presence of dysplastic nevus on the eyelids is not that common [3-5].

Since its description in the 1970’s as Dysplastic nevus, it has always be surrounded by confusion and controversy owing to fact that whether and to what extent dysplastic nevus is an pre-malignant lesion that will progress into melanomas. It is not about the tumour per say but about one’s belief in the multistep tumorigenesis theory [6]. There are people who view DN as an individual entity while some scrap the whole concept [7-9]. To further add to confusion the term “atypical nevus” and DN have been used interchangeably in literature which is not correct for the fact that the former is a clinical term and the latter is a histological entity.

DN are clearly major risk factors for melanoma, but are they precursors of melanoma? And what does it mean to be a melanoma precursor? According to the online Medical dictionary, MedlinePlus [10], a precursor is defined as: 1: One that precedes and indicates the onset of another for example <angina may be the precursor of a second infarction>; or 2: a substance, cell, or cellular component from which another substance, cell, or cellular component is formed especially by natural processes. Using these definitions, DN may be classified as a precursor of melanoma since DN are potential and occasionally actual non obligate precursors of melanoma based on pathologic evaluation of melanoma tumors [11]. Most studies have found that approximately 20% of melanomas arise out of a DN; the numbers arising out of other types of DN have not been well quantified and the majority of melanoma tumors arise de novo [12].

Here in our case, the patient presented with a painless slowing progressive mole on the lower lid which was managed by simple
Dysplastic Nevus of lower eyelid: A Case report

Excision followed by lid repair, was followed up till 3 months and no recurrence was noted. Diagnosis of dysplastic nevus was made on histological basis.

**Conclusion**

Over the past three decades, clinicians have struggled over the diagnosis of DN and there has been an air of confusion about how they differ from “Common Nevus” and their biological behavior. Many clinical studies have flawed because clinically atypical nevi were assumed to be DN without histological confirmation. However, DN represents a distinct histological entity which is more of a risk factor rather than a precursor to melanomas. Hence, we can conclude that histopathological studies are need of the hours and should be used as an integral part of diagnosis of Dysplastic Nevus.

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**Reference**

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