Case Report

Polydactylyof 5th Finger in a 6 Month Old Male: A Case Report

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ABSTRACT

Polydactyly is a congenital anomaly with a wide range of manifestations that occurs in many forms, ranging from varying degrees of mere splitting to completely duplicated thumb. When duplication occurs alone, it is usually unilateral and sporadic. In this case report, I report left hand polydactyly with 2 more fingers on 5th finger in a 6 month old male. He subsequently underwent surgical correction, and the over number thumb was removed with associated meticulous skeletal and soft tissue reconstruction. Polydactyly is the most common congenital digital anomaly of the hand and foot. It can occur in isolation or as part of a syndrome. Surgery is necessary to create a single, functioning thumb indicated to improve cosmetics. Skin, nail, bone, ligament, and musculoskeletal elements must be combined to reconstruct an optimal digit. Treatment options of polydactyly depend on the type and the underlying features. In the literature, different surgical treatments for lateral and medial polydactyly are described.

KEYWORDS
Polydactyly; Hereditary; Excision; Surgery

Please cite this paper as:
Shahraki AR. Polydactylyof 5th Finger in a 6 Month Old Male: A Case Report. World J Plast Surg. 2023;12(1):95-97.
doi: 10.52547/wjps.12.1.95

INTRODUCTION

Polydactyly is a congenital anomaly with a wide range of manifestations that occurs in many forms, ranging from varying degrees of mere splitting to completely duplicated thumb.
When duplication occurs alone, it is usually unilateral and sporadic[1]. Polydactyly of the hands or feet is a common birth deformity that occurs in many forms, ranging from varying degrees of mere splitting to completely duplicated thumb. Preaxial polydactyly is the most common of congenital hand anomalies. It can occur in isolation or as part of a syndrome. Isolated polydactyly is often autosomal dominant, while syndromic polydactyly is commonly autosomal recessive[2,3].
Polydactyly is classified into preaxial, central, and postaxial types. Preaxial polydactyly, the most common type, refers to the duplication of the first digital ray[4]. Several classifications were proposed, among which Wassel's classification, is being widely used in clinical fields[5]. Interestingly sometimes clinically recognized types do not correspond with the findings recorded at surgery. Reason behind it is the

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Received: 2022/12/18
Accepted: 2023/02/13

[Downloaded from wjps.ir on 2026-11-05]

[DOI: 10.52547/wjps.12.1.95]

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Figure 1: The cases with left hand polydactyly of 2 more fingers

presence of cartilaginous epiphysis which does not show bifurcation level between two duplicated components in immature hand. So the classifications become inappropriate to some extent. Radiological classification alone has little value in detection of clinical types as well as in preoperative assessment[1]. This case was rare because of 2 additional finger based on 5th finger and management and reconstruction was so hard that patient to have normal finger.

CASE PRESENTATION

Here a case of 6 months old male with left hand polydactyly of 2 more fingers is reported (Fig. 1). He was 6 months year old male that referred to surgery clinic. After examination about co syndromes that negative for him we at first reduce the number of fingers and then do associated meticulous skeletal and soft tissue reconstruction for him.
The content of this manuscript is in accordance with the declaration of Helsinki for Ethics. No committee approval was required. Oral and written consent to participate was granted by the parents.

DISCUSSION

Polydactyly is the most common congenital digital anomaly of the hand and foot. The frequency of polydactyly varies widely among populations. It may be an isolated condition or part of a congenital syndrome. Polydactyly is generally classified into three major groups: medial ray (preaxial), central ray and lateral ray (postaxial).Because hand and foot polydactyly are associated with congenital defects in 23.4% of patients, genetic workup and thorough medical examination in these patients is recommended[6]. Radiographs of the affected limb are recommended to show whether the rudimentary digit contains skeletal elements. The degree of deviation of the digit and the size of the articulating metacarpal or metatarsal also may be helpful in surgical planning[7].
Surgery is necessary to create a single, functioning thumb. Typically this is performed around one year of age, before the development of pinch and fine motor function[8]. Polydactyly presents in different ways with different reasons for the patients seeking care. Although a congenital condition, some patients may be seen for the 1st time in adulthood. Excision must be carefully carried out to prevent complications[9]. Treatment options of polydactyly depend on the type and the underlying features.
In the literature, different surgical treatments for lateral and medial polydactyly are described[10].

COMPETING INTERESTS

The author declares that there is no competing financial interests.

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[DOI: 10.52547/wjps.12.1.95]

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[Downloaded from wjps.ir on 2026-11-05]

[DOI: 10.52547/wjps.12.1.95]