

## Research Article

# Lumps and Bumps on Hands: A Diagnostic Clue

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## Abstract

In dermatology clinics we routinely come across cases of lesions on the hands. Patients may present with papules, vesicles, nodules on the hands. Such lumps and bumps on hands can be a manifestation of various diseases, ranging from benign lesions to systemic conditions. Routinely the rash on hands indicates primary skin disease. But lesions on hands can be seen in inflammatory conditions like psoriasis, eczema, rheumatoid arthritis, gout or infective diseases like bacterial (folliculitis, anthrax), viral (pox virus, herpetic whitlow, molluscum, wart), mycobacterial (tuberculosis verrucosa cutis, lupus vulgaris), fungal infections (sporotrichosis). Few benign lesions like keratoacanthoma, ganglion or malignant conditions like SCC, Melanoma may present. A thorough examination and diagnosis of these lesions can provide valuable insights into underlying conditions. Here I am sharing interesting clinical cases highlighting the significance of hand lesions in diagnosing diseases like infective (secondary syphilis) and inflammatory conditions (gout, psoriatic arthritis) as well as clues to variety of systemic diseases (leprosy, tuberous xanthoma). Lumps and bumps on hands can serve as a valuable diagnostic clue to various diseases. The diagnosis of hand lesions is mostly clinical and depends on the clinical history and exploratory objective findings. A proper history taking, thorough clinical and systemic examination, combined with laboratory tests can aid in accurate diagnosis and timely management. Hand lesions may be a window of systemic disease.

## Keywords

Lumps, Bumps, Hands

## 1. Introduction

Hands are the one of the most exposed body parts in human being. In routine life it is not only functionally important but is also cosmetically important. Your first impression is important, like that while shaking hands smooth, smart,

attractive hands are your impression. In ancient ages palm lines were used for palmistry. But in modern era the lesions on hands indicates many diseases [1] It can work as medical palmistry.

*Table 1. 1-6.*

Case Number	Title	Introduction	Case presentation	Investigations	Management
1	Gouty nodule on		A 52-years-old man	Laboratory	Gout is a common form of

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Case Number	Title	Introduction	Case presentation	Investigations	Management
	hands a case report		presented with painful, swollen nodules on his hands [2, 3] (Figure 1). Laboratory investigations revealed elevated serum uric acid levels. the patient was diagnosed with gout and treated with allopurinol.	investigations revealed elevated serum uric acid levels (10.73), elevated CRP	inflammatory arthritis characterized sudden, severe attacks of pain, swelling, redness and tenderness in one or more joints. gouty typhi are deposits of monosodium urate crystals that can form in various tissues, including the skin, joints, and bones. Patient was treated with allopurinol.
2	Tuberous xanthoma on the hands [4] a case report	Tuberous xanthoma is a form of xanthoma characterized by the deposition of lipid-laden macrophages in the skin. It is often associated with hyperlipidemia.	A 3-years-boy brought by parents to our clinic with a history of few, painless yellowish nodules on his knuckles (Figure 2). The nodules were firm, measured 0.5-2 cm in diameter, and were located on the dorsal aspect of hands mainly knuckles.	On investigations there were elevated LDL cholesterol and elevated triglycerides.	The patient was diagnosed with tuberous xanthoma [5] and treated under guidance of cardiologist.
3	Secondary Syphilis Presenting as Palmoplantar Rash	Secondary syphilis is a systemic infection caused by the bacterium <i>Treponema pallidum</i> [7]. It can present with a wide range of symptoms, including skin rashes, fever, and, lymphadenopathy.	A 38-year-old man presented to our clinic with a 2 weeks history of multiple, asymptomatic papulosquamous rash over palms [7]. The lesions were measured approximately 0.5-1 cm in diameter, and were arranged in a symmetrical pattern (Figure 3). Bielt's sign is characterized by erythematous macules with peripheral scaling [6].	Laboratory tests revealed Positive TPHA TEST (1:320) million units (IM).	The patient was diagnosed with secondary syphilis and treated with benzathine penicillin (2.4 [8])
4	Hansen's disease presented as hand nodule		A 56 years old male presented with lesion hand for 2-3 months. On examination there was a nodule on left wrist and second on rt index finger on distal interphalangeal joint [9] (Figure 4). The nodules were painless, hard to firm in consistency [10, 12]. Non-oozy, no regional lymphadenopathy. On detail examination there was hypopigmented, hyposthetic patch over left arm (figure 5).	On histopatholgy, it was confirmed to have leprosy [11].	The patient was started on multi-drug therapy.
5	Dermatomyositis [13]		A 15-years-old student visited with complaints of recurrent periorbital swelling and rash over hands. On examination there was left sided periorbital swelling (figure 6) and papulosquamous rash over knuckles (Figure 7). There	On investigations there were raised liver enzymes and lactate dehydrogenase (1104 IU/I).	The patient was referred to rheumatologist for further management.

Case Number	Title	Introduction	Case presentation	Investigations	Management
6	Psoriasis		<p>violaceous appearance over the rash, which gave the clue. No other major complaints were present like arthritis, no proximal weakness.</p> <p>A 64-years male presented with complaints of inability to close fingers [14]. On examination there was swelling, stiffness at interphalangeal joints (figure 8). Also, a deformity was noted at distal little finger [15].</p>	On x-ray there was pencil-in-cup like deformity.	He was started with methotrexate pulse therapy.

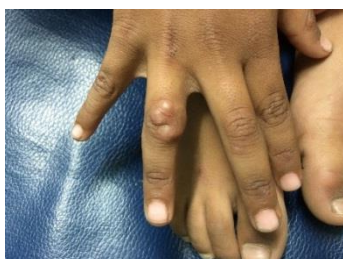
Case 1

*Figure 1. Gout.*

Case 4

*Figure 4. Hansen's disease.*

Case 2

*Figure 2. Tuberous Xanthoma.*

Case 4

*Figure 5. Hansen's disease.*

Case 3

*Figure 3. Secondary syphilis.*

Case 5

*Figure 6. Dermatomyositis- Gottron's papule.*

## Case 6



**Figure 7.** Dermatomyositis- Heliotrope.

## Case 6



**Figure 8.** Psoriasis.

## 2. Discussion

Lumps and bumps on hands can be a manifestation of various diseases, ranging from benign lesions to systemic conditions. Skin lesions can present in various morphological presentations ranging from macules, papules, vesicles, pustules to scaly disorders. Many times, mixed morphology is present. Basic pathology may be localized to hands but sometimes it is associated with other systems. In such cases further investigations are required.

Here we have shared very interesting cases. The first case visited my clinic for lump on hands. He was not at all complaining of joint pain and other symptoms of gout. The patient of tuberous xanthoma was also diagnosed to have hyperlipidemia and was referred accordingly. The third case who was worried about palm rash as social stigma and denying any history of sexual exposure. But our suspicion helped to diagnose secondary syphilis and was treated. Secondary syphilis is reemerging as a infection [8]. The fourth case visited clinic for swelling over hand [10] and on detailed skin examination we saw the patch. The patient was not worried of hyposthetic patch because of asymptomatic nature. Similar way proper history, complete skin examination, thorough investigations helped people to diagnose systemic diseases from palm lesions.

The hand lesions are caused by various diseases like 1)

Infectious diseases: Bacterial- impetigo, paronychia; Viral- herpes, warts; Fungal- sporotrichosis; Parasitic- scabies, tungiasis; Mycobacterial diseases like skin tuberculosis, hansen's [12]. 2) Inflammatory Diseases-Psoriasis [14, 16], Lichen planus. 3) Benign and malignant conditions-Keratoacanthoma, Melanoma, Squamous cell carcinoma, Ganglion. 4) Systemic Disease-Rheumatoid arthritis, Sarcoidosis, Vasculitis, Tuberous xanthoma, Lipoid proteinosis, Scleromyxedema.

To confirm the diagnosis proper history is important. During physical examination, not only local examination but other body should be examined. Because it may give you a clue. Laboratory tests helps to confirm the diagnosis in various diseases.

Management depends upon the diagnosis. Antibiotics, antifungals, antimycobacterial drugs helps to treat the infective diseases. In systemic diseases dermatologist may need help of another specialist. Surgical interventions and lifestyle modifications are advised as per the diagnosis.

The aim of presentation is to share the interesting cases where the patient was worried about the rash on skin. And they diagnosed with various systemic diseases which help the patients for proper diagnosis and management. Being a dermatologist it's our duty to examine thoroughly.

## 3. Conclusion

Lumps and bumps on hands can serve as a valuable diagnostic clue to various diseases. A thorough clinical examination, combined with laboratory tests and imaging studies, can aid in accurate diagnosis and timely management.

## Abbreviations

IPJ	Interphalangeal Joint
SCC	Squamous Cell Carcinoma

## Author Contributions

Anil Balkrishna Bhokare is the sole author. The author read and approved the final manuscript.

## Conflicts of Interest

The author declares no conflicts of interest.

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