SKIN CANCER (OTHER THAN MELANOMA)

A CASE OF BULLOUS GOUT.

Fabrizio Galimberti [1] - *Yumeng Li* [1] - *Paolo Romanelli* [1]

University Of Miami, Dermatology And Cutaneous Surgery, Miami, United States [1]

Background: Gout is the most common cause of inflammatory arthritis in the world and its incidence and prevalence is increasing in both developed and developing countries. Gout is characterized by hyperuricemia (serum urate level > 6.8mg/L) which can result in formation of monosodium urate (MSU) crystals. If untreated, MSU deposits accumulate in soft tissue resulting in tophi, recurrent attacks, and progressive joint destruction. The gold standard for diagnosing gout is the identification of MSU crystals in joint fluid. The histopathological features of gout are masses of pale granular basophilic material with needle-like clefts in radial arrangement represented by dissolved urate crystals during the processing of the specimen. If the specimen is fixed in absolute alcohol, which best preserves the urate crystals, the histological features found in gout are characteristic and could be identified by polarized light microscopy.

Observation: A 68 year-old female with past medical history of end stage renal disease, gout well controlled on colchicine, and severe aortic stenosis was admitted for TAVR. The surgery was complicated by acute kidney failure. Dermatology was consulted for blisters on right hand that appeared overnight. Biopsy showed tophus in the dermis, consistent with gout. Amorphous eosinophilic material surrounded by foreign body reaction was present in the dermis. Patient's urate was found to be 10.1mg/dL Due to formalin-fixation, polarizing light examination failed to demonstrate characteristic birefringence but morphologically it was a classical tophus. However, fixation in alcohol brown revealed monosodium urate crystals deposited in the dermis.
Additionally, diagnostic refractile lightly brown monosodium urate crystals arranged in short intersecting fascicles where present under normal light microscopy.

Key message: Gout can present with bullous lesions.