

Rice body due to lupus

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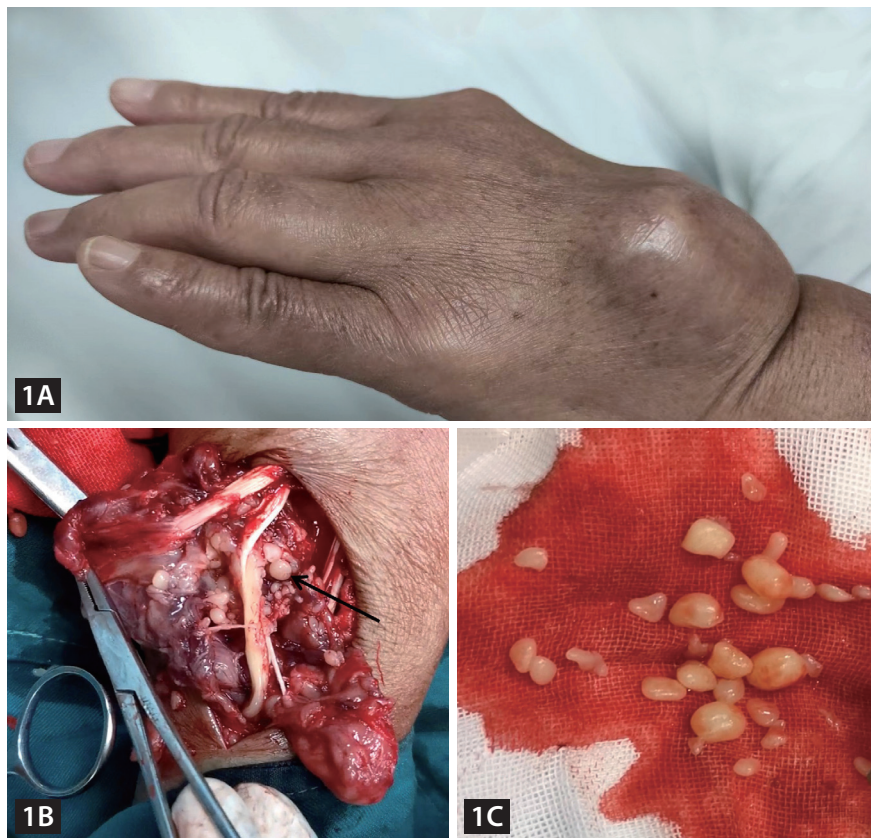


Figure 1. (A) Enlarged mass on the back of left hand. (B, C) Abundant rice bodies were found in the back of left hand and wrist were found.

A 54-year-old woman who presented with enlarged mass on the back of her left hand and intermittent painful lump on her left wrist (Fig. 1A), accompanied by movement limitation for 1 years was admitted to the First Affiliated Hospital, Fujian Medical University. She denied fever and night sweats. She had a medical history of systemic lupus erythematosus and lupus nephritis which was well controlled by glucocorticoid and rituximab therapy. Physical examination of the left hand revealed swelling, mild tenderness and lim-

itation of range of motion. Laboratory data showed erythrocyte sedimentation rate of 39 mm/h, C-reactive protein of 1.7 mg/L, serum anti-dsDNA of 159.6 IU/mL (normal reference < 100 mg/L), serum complement 3 of 0.04 g/L (normal reference 0.11–0.32 g/L) and serum complement 4 of 0.51 g/L (normal reference 0.76–1.70 g/L). The complete blood count test was normal. Ultrasonography of the left hand showed the presence of fluid collection and some low-level internal echoes without acoustic shadow. A radical

synovectomy was performed and she had immediate improvement of symptoms. During surgical exploration, abundant rice bodies were found in the back of left hand and wrist were found (Fig. 1B, C). The samples were delivered for pathological examination. An open incisional biopsy demonstrated multiple small ovoid nodules of fibrinoid proteinaceous material, which were consistent with rice bodies, with prominent granulomatous response. Staining of tissue section for acid-fast bacilli was negative. We then sent the tissue for next-generation sequencing technology to rule out all infectious pathogen including tuberculosis and atypical mycobacterium infection. The result turned negative.

With the surgery and treatment of lupus, the patient had no recurrence and her wrist had total recovery with full active and passive range of motion. Thus, we confirmed the cause of rice bodies was lupus.

Rice body is a polymorphic, polished free rice-like body that often locates in the articular cavity, periarticular bursa, and tendon sheath. It has been reported in several clinical diseases including autoimmune diseases and tuberculosis and non-tuberculous mycobacteria infections. Patients with rice body should be carefully excluded the infection and send the surgical specimen cultures for bacteria.

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CRedit authorship contributions

Zishan Lin: writing - original draft; Xiaohong Zhang: visualization; Cai-ming Chen: data curation; Yanfang Xu: writing - review & editing.

Conflicts of interest

The authors disclose no conflicts.

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