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CASE REPORT

Multiple rheumatoid bursal cysts that were finally effectively treated by combining surgical resection and sclerotherapy☆

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Summary A 71-year-old male who had been diagnosed with rheumatoid arthritis 3 years previously developed multiple subcutaneous cysts on his buttock, elbow, knee, hand and back. The diameters of the cysts were 10—15 cm. The characteristic fluid and pathology of the cysts led to the diagnosis of multiple rheumatoid bursal cyst (MRBC). The patient was keen to treat the cyst on his buttock as it hampered his sitting position. However, it resisted several kinds of sclerotherapies, including absolute alcohol, OK-432, minocycline and dexamethasone. When the cyst grew further, it was resected surgically; however, the cyst recurred immediately. It was finally brought under control by injecting it with OK-432.

The thick cyst wall, which resisted the various sclerotherapies, was removed surgically, and a new capsule developed inside the cavity; adding a sclerotant to newly made thin capsule made us possible to treat this resistant large bursal cyst.

Multiple rheumatoid bursal cyst (MRBC) is a rare disease that was first described by Yasuda et al. in 1989 when they reported the case of a patient with rheumatoid arthritis who had multiple synovial cyst-like subcutaneous swellings that contained a sterile milky fluid.[1] These cysts can develop all over the body without a communicating adjacent joint, and histology reveals synovial villous hyperplasia and eosinophilic depositions.

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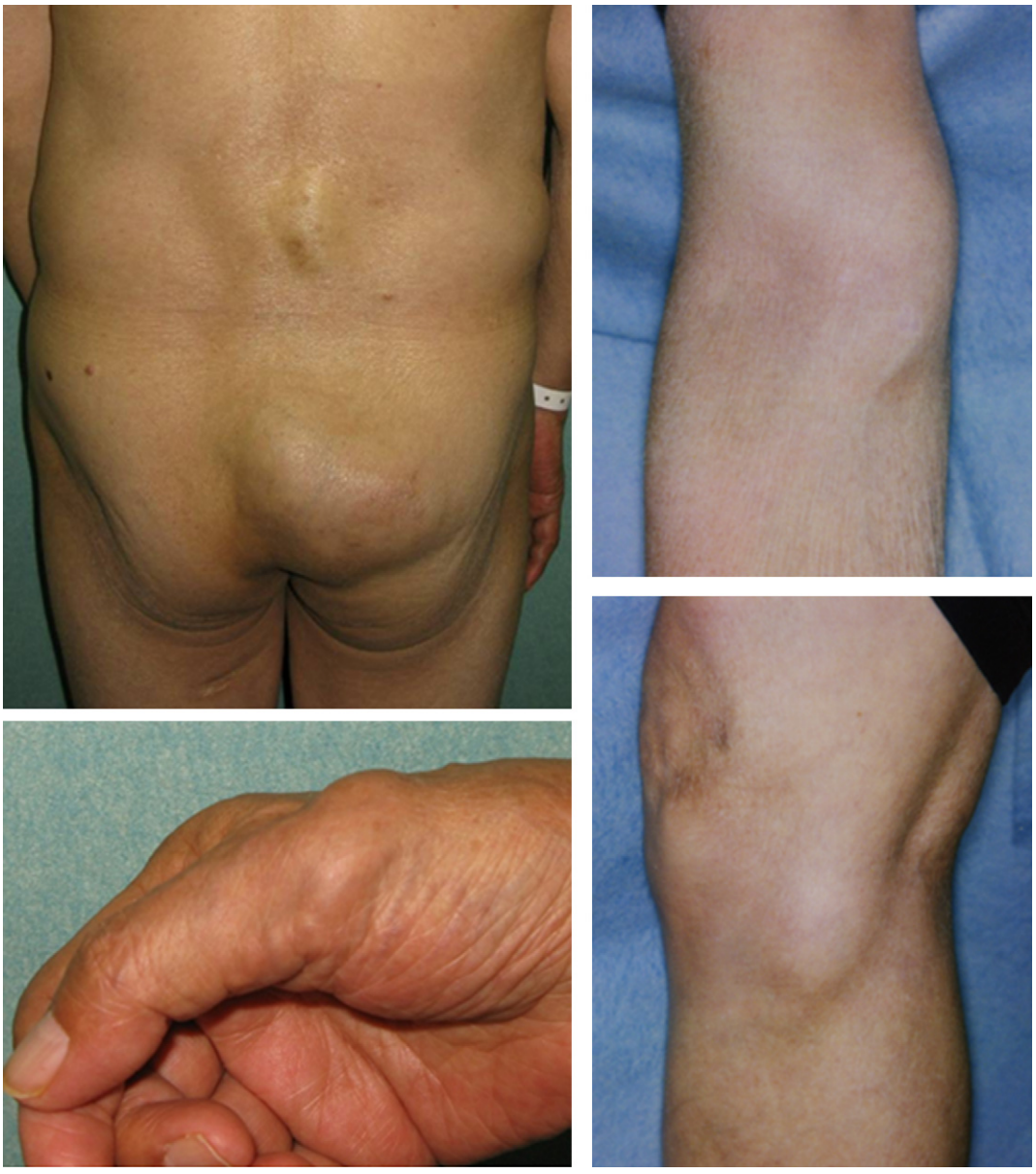

Figure 1 The cysts on the first appearance of the patient at our clinic. In total, there were six cysts on the trunk and upper and lower limbs. The lumbar region cyst was 5 cm in diameter and the buttock cyst was 15 cm in diameter. The cysts on the right elbow and knee were 10 cm in diameter while the cyst on the right hand was 3 cm in diameter.

While it has been reported that these cysts can be treated by sclerotherapy or surgical resection,[2] a standard treatment has not yet been established. This reflects the varying conditions of the cysts and indicates that the most suitable treatment should be decided on a case-by-case basis.

Here, we present a case report of an MRBC that resisted various sclerotherapies and surgery alone but could finally be treated by a combination of surgical resection and sclerotherapy using OK-432.

Case report

A 71-year-old male was diagnosed with rheumatoid arthritis 3 years ago and since then has been treated with 6 mg of prednisolone. Recently, the patient developed multiple subcutaneous cysts on his buttock, elbow, knee, hand and back over the space of 1 month. These cysts then gradually enlarged and the patient came to our clinic.

At his first appearance at our clinic, there were six cysts on his trunk and extremities in total (Figure 1). The cysts were soft and not mobile against the base tissue. The buttock cyst was 15 cm in diameter while the cysts on the knee and elbow were 10 cm in diameter (Figure 1). The patient wanted to treat the largest one on his buttock, as it hampered his sitting position.

Abnormal laboratory results were an increased C-reactive protein level (4.9 mg dl^{-1}) and the presence of antinuclear antibody and rheumatoid factor. Puncture of the cysts revealed that they were filled with a yellow-chalky thick fluid with amorphous floaters; the fluid did not contain any bacteria. In total, 100—120 ml of fluid could be aspirated