

세포교정영양요법(OCNT)을 이용한 베이커 낭종 개선 사례

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A Case Report of Baker's Cyst Improvement Associated with Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT

Objective: A Baker's cyst, also referred to as a popliteal cyst, is a posterior knee cyst that commonly accompanies various intra-articular knee pathologies, such as osteoarthritis and meniscal tears. Baker's cysts may continue to cause posterior knee pain even after surgical treatment of the underlying intra-articular condition, and these symptoms are often associated with cyst size.

Case Report: The patient was a Korean woman in her 60s who was diagnosed with a posterior cyst in the left knee in November 2021. She underwent multiple cyst excisions at an orthopedic clinic; however, recurrence persisted, and she discontinued hospital treatment. Subsequently, she received Ortho-Cellular Nutrition Therapy (OCNT), incorporating anthocyanins, omega fatty acids, and pumpkin extract. Following the intervention, visual reduction in cyst size was observed.

Conclusion: Although improvement of the posterior knee cyst was observed following OCNT in this patient, the intervention was customized to a single individual and therefore cannot be generalized to all cases of Baker's cyst. Nevertheless, given that the cyst recurred despite repeated surgical excisions, the observed reduction in cyst size following OCNT suggests potential clinical relevance, warranting the reporting of this case.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), Baker's cyst, osteoarthritis, anthocyanin, omega fatty acids, pumpkin extract

Introduction

A Baker's cyst, also known as a popliteal cyst, is a posterior knee cyst commonly associated with various intra-articular knee disorders, including osteoarthritis and meniscal tears. Histologically, the cyst wall resembles synovial tissue with fibrotic changes and may present with nonspecific chronic inflammation. Baker's cysts can cause posterior knee pain even after surgical treatment of the underlying intra-articular pathology, and such symptoms are largely related to the size of the cyst.¹

Patients with Baker's cysts typically present with symptoms associated with meniscal or chondral pathology. Clinical manifestations resulting from the cyst include a sensation of

fullness, discomfort, palpable mass, and stiffness in the posterior or posteromedial aspect of the knee. Some individuals may experience pain during full knee extension, and in cases where the cyst is sufficiently large to cause mechanical impairment, functional limitation of knee flexion can occur. When the cyst is palpable, it typically feels firm on full extension of the knee and softer during flexion, a finding referred to as *Foucher's sign*. This palpable feature is useful in differentiating Baker's cysts from other popliteal masses that are not affected by knee positioning, such as popliteal artery aneurysms, ganglion cysts, adventitial cysts, and tumors.²

Initial management of Baker's cysts prioritizes non-surgical treatment for at least six weeks when no vascular or neurological compression is present. During this period, rehabilitation aimed at maintaining knee joint flexibility is essential, and intra-articular corticosteroid injections may help reduce cyst size and associated symptoms. However, if symptoms fail to improve after approximately two months of conservative therapy, surgical intervention may be considered. In such cases, treatment should focus on correcting the underlying intra-articular pathology responsible for excessive synovial fluid production, rather than solely excising the cyst.³

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Although surgical excision of a Baker's cyst without correction of the associated intra-articular pathology has been reported, this approach yields unsatisfactory outcomes with high recurrence rates. Such recurrence is understood to result from persistent intra-articular disease and repeated effusion. In published reports, approximately 63% of patients who underwent cyst excision experienced recurrence, and wound complications or pseudothrombophlebitis occurred in about 33% of cases. These findings indicate that the key principle in the management of Baker's cysts lies not in cyst excision alone, but in addressing the underlying intra-articular pathology.⁴

The patient first detected a palpable mass in the posterior region of the knee in November 2021. Over the following two years, she underwent multiple surgical interventions but reported incomplete symptom resolution. Subsequently, Ortho-Cellular Nutrition Therapy (OCNT) was initiated, and nutritional supplementation was prescribed with continued adherence encouraged. After approximately two years of OCNT, a reduction in the size of the posterior knee cyst was observed. With the patient's informed consent, this case is presented to report these findings.

Case Study

1. Subject

A single case of a patient with a Baker's cyst was examined.

- 1) Name: Kim OO (62 years old/F)
- 2) Diagnosis: Baker's cyst
- 3) Date of onset: November 2011
- 4) Treatment period: July 2023 ~ present
- 5) Chief complaints: Baker's cyst
- 6) Medical history: None
- 7) Social history: None
- 8) Family history: None
- 9) Current illness and medications: None

2. Methods

Cyaplex X tablet (303, twice a day, three capsules per dose)
Eufaplex Alpha capsule (303, twice a day, three capsules per dose)
Sinsuwon (101, twice a day, one sachet per dose)
Haepobooster F granule (101, twice a day, one sachet per dose)

Results

The patient was diagnosed with a posterior knee cyst in November 2021 and subsequently underwent cyst excision in March and June of 2022. Despite these procedures, recurrence persisted, leading to two additional excisions performed in July 2023. Thereafter, she visited a pharmacy and began OCNT, and she adhered to the prescribed supplements on an almost daily basis. Currently, the posterior knee cyst has nearly resolved, and the changes in cyst size are presented in Fig. 1.

Discussion

The patient was found to have a posterior cyst in the left knee in November 2021. She subsequently underwent cyst excision at an orthopedic clinic in Seoul in March and June of 2022, but recurrence was noted, and two additional excisions were performed in July 2023. However, despite repeated surgical

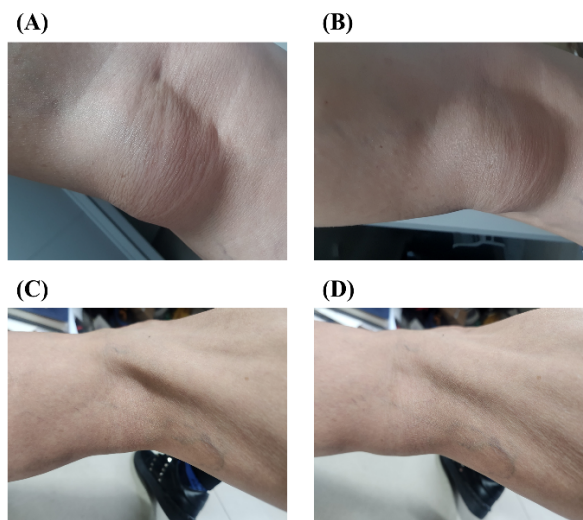


Fig. 1. Posterior view of the patient's left knee before and after OCNT (A), (B) Images taken in November 2021. (C), (D) Current images of the patient's left knee. A noticeable reduction in the posterior knee cyst is observed following OCNT administration.

interventions, the cyst did not completely resolve and recurred in the same region. Thus, it was determined that simple excision alone would be insufficient for fundamental management, and a customized regimen aimed at improving intra-articular pathology and inflammatory conditions was implemented.

A Baker's cyst is associated with intra-articular knee pathology and is thought to result from the migration of synovial fluid produced through joint inflammation. Therefore, reducing inflammatory activity within the joint was considered a key therapeutic strategy. Cyaplex X tablet, which was prescribed to the patient, contains anthocyanins, a group of polyphenolic flavonoid pigments. Anthocyanins have been reported to exert anti-inflammatory, antioxidant, antitumor, and neuroprotective effects. In particular, several studies have demonstrated that anthocyanins can modulate inflammatory responses by inhibiting pathways such as NF- κ B and MAPK, thereby improving the pathophysiological processes of inflammatory diseases.⁵ Based on this evidence, an anthocyanin-containing nutritional regimen was administered in this case to improve the intra-articular inflammatory environment of the patient's knee.

Eufaplex Alpha capsule, also prescribed to the patient, contains a high concentration of omega fatty acids, particularly omega-3 polyunsaturated fatty acids (PUFAs). Omega-3 PUFAs are known to alleviate intra-articular inflammation by promoting the production of anti-inflammatory lipid mediators and modulating cytokine secretion. Several studies have reported that omega-3 PUFAs intake contributes to pain reduction, regulation of cartilage metabolism, and improvement of inflammatory markers in patients with osteoarthritis.⁶ Based on these mechanisms, omega fatty acids were prescribed in this case to target the inflammatory environment within the knee joint.

Lastly, Sinsuwon, which was prescribed to the patient, contains pumpkin-derived components. Pumpkin and pumpkin seed oil (PSO) have been reported to exhibit anti-inflammatory, antioxidant, and fluid-regulating properties. PSO is particularly rich in unsaturated fatty acids and has demonstrated suppression of inflammatory mediators and reduction of edema in both acute and chronic inflammation models. In one study, PSO significantly reduced edema, congestion, epithelial hyperplasia,

and cellular infiltration in tissues with experimentally induced inflammation, and markedly decreased mast cell counts in a chronic inflammation model.⁷ Accordingly, pumpkin-derived components were prescribed in this case with the aim of supporting the reduction of intra-articular effusion and alleviating knee swelling.

The patient continuously received OCNT-based nutritional therapy from July 2023 onward, after which a gradual reduction in the size of the posterior knee cyst was observed. This change was sufficiently evident upon visual inspection. Although this report describes a single case and therefore cannot be generalized to all patients with Baker's cysts, the decrease in cyst size despite repeated recurrence following surgical treatment suggests potential clinical relevance. With the patient's informed consent, this case is presented to share the observed therapeutic outcome.

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