Lipoma arborescens; successfully treated by yttrium-90 radiosynovectomy

Taner Erselcan,* Okay Bulut,** Sema Bulut,*** Derya Dogan,*
Bulent Turgut,* Semra Ozdemir* and Fahrettin Goze****

Departments of *Nuclear Medicine, **Orthopedics and Traumatology, ***Radiodiagnostics, ****Pathology, Cumhuriyet University, School of Medicine, Sivas, Turkey

Although radiosynovectomy (RS) applications have been carried out for many years, clinical indications of this non-invasive procedure is thought to be limited probably due to the lack of information of clinicians. Clinicians' preferential indication for RS is the treatment-resistant synovitis of individual joints, i.e. despite systemic pharmacotherapy and intra-articular steroid injections. We present here a case of "lipoma arborescens" treated by yttrium-90, which is a rare intra-articular lesion characterized by villous proliferation of the synovial membrane and hyperplasia of subsynovial fat. The results of clinical, biochemical and hematological examinations, magnetic resonance (MR) imaging, arthroscopy and histological analysis have shown that the etiology was lipoma arborescens in a female patient, aged 36 having swelling and sometimes associating pain at her right knee for 4 years. We have applied to our patient's right knee RS with 185 MBq yttrium-90 colloid together with 40 mg of methylprednisolone acetate, although in our literature survey we have not met any similar case being treated with such indication. Even a year after the application, the patient has absolutely benefited from the treatment clinically, and this was also confirmed by comparative MR images (pre- and post-treatment). Consequently, we consider that Y-90 treatment might be applicable in suitable cases with lipoma arborescens.

Key words: lipoma arborescens, yttrium-90, radionuclide synovectomy, synoviorthesis