Photoactivated platelet-rich plasma therapy for a traumatic knee chondral lesion


Abstract

To evaluate the effect of combining photoactivation therapy with platelet-rich plasma injections in the treatment of a traumatic chondral lesion of the knee. A 38-year-old man presented with left-knee pain and swelling following a basketball injury. MRI demonstrated a full-thickness lateral tibial plateau chondral flap with subchondral cyst formation and marrow oedema. The patient underwent a course of photoactivated platelet-rich plasma (PAPRP) injections. Patient outcome measures included the numerical pain rating scale and the Western Ontario and McMaster Universities Arthritis Index 3.0 (WOMAC). Following treatment, the patient reported improvement in both pain and function as measured by the numerical pain-rating scale and WOMAC. MRI showed resolution of subchondral bone marrow bruising/oedema. No complications were noted. In this case report, PAPRP injections demonstrated improvement in all recorded outcome measures. Recognising the limitations of a single case report, the results highlight the need for more formal controlled trials to determine the potential use of PAPRP in the treatment of chondral lesions.