Background and Aims Chronic posterior knee pain is a common patient complaint that patients seek medical attention from their physicians. Although first line treatments including physical therapy, oral medications or steroid injections are often efficacious, they could provide temporary benefits. Ultrasound-guided infiltration of the interspace between the popliteal artery and capsule of the knee (iPACK) block is suggested for controlling posterior knee pain. We present two patients of posterior knee pain successfully managed with a novel technique, pulsed radiofrequency targeting the area between the popliteal artery and capsule of the knee (R-PACK).

Methods With the patient in a prone position, a 6–15 MHz high-frequency linear US probe was placed at the medial knee joint to identify the femoral condyle with the common peroneal and tibial nerves. At this level, the needle was advanced in a lateral to medial direction using an in-plane approach until the needle tip was located between the popliteal artery and capsule of the knee. Then, pulsed RF was performed for 10 minutes, with a pulse width of 10 ms and 60 V with the temperature set at 42 °C.

Results Following the R-PACK both patients' NRS scores decreased in the 2nd week, 1st, 3th and 6th months (Table 1). Also patients quality of life and functional capacity scores improved (Table 2).

Conclusions Here in, with these two cases, we described a modified novel technique for posterior chronic knee pain and showed successful control of pain for a 6-month follow-up period.