Dr. Elsaman, *et al* reply

To the Editor:

The theory that pain in osteoarthritis (OA) is due to effusion is not answered in our study[1]. All the patients included in our study initially had effusion on clinical and ultrasound examination[1]. To prove the theory that pain in OA had been due to effusion, we would have had to include patients with painful osteoarthritic knee and examine all of them by ultrasound to detect the cause of pain.

The ratio of painful osteoarthritic knee effusion ranges from 44% to 79%[2,3]. However, 16% of osteoarthritic knee effusion is painless[4]. It can be stated that many painful osteoarthritic knees had effusion, but others may have had bursitis or associated activity of crystal-induced arthritis or severe thinning of the knee cartilage or more rarely, degenerative meniscal tear.

According to the results of our study we can say that most of the effusion is painful, but we cannot confirm that every painful osteoarthritic knee is due to effusion. Pain in OA is multifactorial, and effusion plays a crucial role.

The theory that effusion is due to mechanical and not inflammatory cause in OA has been supported in our study because reduction of effusion thickness using spironolactone was maintained after stoppage of treatment for 2 weeks. Further, the addition of power Doppler examination to the painful osteoarthritic knee could clarify more the inflammatory or mechanical nature of effusion. If the cause of effusion is inflammatory, we expect marked power Doppler activity.

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