LETTER TO THE EDITOR

Reply to the letter by D. Goutallier, S. Van Driessche, S. Le Mouel

Thank you for the interest you have shown in our work. Our article stated that the main action mechanism of this procedure lay in correcting tibial torsion disorder and secondarily in realigning the extensor system, as tibial tuberosity elevation is an integral part of the technique. We agree that AT-TG (the distance between the anterior tibial tuberosity and the trochlear groove) should have been measured at follow-up; as CT was the only reliable method, however, we considered that it would have exposed patients to unacceptable additional radiation. In their letter, Daniel Goutallier et al. suggest that simple anterior tibial tuberosity transposition could have relieved our patients’ pain. Our results disavow this: a quarter of the patients underwent exactly such a procedure, without improvement, which implicates torsion disorder and the importance of correcting it. We did not investigate correlation with trochlear dysplasia, of which only one was of grade-D severity with history of dislocation. The series, thus, essentially comprised patients presenting with pain but stability, in whom trochleoplasty was not indicated in the absence of sagittal abnormality.

Daniel Goutallier et al. suggest, in their letter, that the action mechanism of the procedure, we analyze actually involved the impact of osteotomy without precise anatomic objective, as in MacMurray osteotomy or Benjamin’s double osteotomy. The population in our series was specific, comprising patients with seriously disordered tibial torsion; surgery did not apply biomechanical principles (such as the muscular relaxation used in MacMurray osteotomy) but sought to correct an architectural defect. Independently of the results in terms of pain, the series seems to confirm these data, in as much as correcting torsion, which preoperatively impaired gait in 32 out of 36 cases, led to 21 knees showing no gait impairment on flat ground or stairs at follow-up. We admit that a mean 4.5 years’ FU (range, 1 to 14.5 years) is probably too short to be able to validate our findings definitively; the oldest cases, however, exceed 10 years’ follow-up without the degradation that could be expected from a mere “osteotomy effect” acting alone. And finally, if late degradation were to occur, revision would have been facilitated by prior correction of torsion.

Our series included only two knees with osteoarthritic lesions of the knee. The objectives in terms of frontal correction were, thus, different from those in osteoarthritic varus knee, where we apply the principles of 3° to 6° valgus correction, as recommended by Hernigou et al. [1]. In our non-osteoarthritic young population, it seemed more reasonable to aim at normalization. On the other hand, it is true that derotation sought not to prevent possible medial tibiofemoral degradation secondary to anterior tibial tuberosity transposition, but to correct the deformity underlying the patients’ complaints [2]. Likewise, we agree with the idea of an analysis of this series at 10 years’ FU so as definitively to validate the suggested treatment strategy.

References


N. Fouilleron a, b, *, E. Marchetti a, b, G. Autissier a, b, F. Gougeon c, H. Migaud a, b, J. Girard a, b

a University Department of Orthopedic and Traumatologic Surgery, Lille Nord-de-France University, Lille University Hospital Center, 59000 Lille, France
b Orthopedic Dept, Salengro Hospital, Lille Regional University Hospital Center, rue Emile-Laine, 59037 Lille, France
c Groupe Nord-genou, 122, rue de La-Louvière, 59000 Lille, France

* Corresponding author.
E-mail address: nicolas.fouilleron@gmail.com (N. Fouilleron)