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LETTERS TO THE EDITOR

Letter related to the article “Legg-Calvé-Perthes disease”[☆]

Carta en relación al artículo “Enfermedad de Legg-Calvé-Perthes”

Dear Sir,

In the 4/2011 issue of *Revista Española de Cirugía Ortopédica y Traumatología*, the subject of Perthes disease was addressed in an Update by Drs. Salcedo, González, and Albiñana.

First, may I commend these authors for their efforts and congratulate all of us on the steady improvement in Orthopaedics in Spain and how it is becoming comfortable with the new era. Gone are the years when, here in Spain, we continued to prescribe the various unloading braces, even though they had been abandoned in more advanced countries—as if what was published in international journals made no impression on us.

I would like to clarify several points, however. First, regarding the incidence of the disease, thanks to the data from research presented at the last *Congreso de la Sociedad Española de Ortopedia Pediátrica* held in La Coruña, we can now report that the incidence in Spain is 1.59 cases per 100,000 inhabitants.¹ This research describes the study's population base over the last 16 years (1994–2010) as the population peripheral to Madrid, located in the municipalities of Coslada, San Fernando, Mejorada, and Velilla de San Antonio and ranging from 126,000 to 167,000 inhabitants during these years, where 37 cases of Perthes were diagnosed and, surprisingly, a slow but steady reduction in the incidence of the disease was also noted.

As far as treatment is concerned, more and more cases are being treated surgically because, from lengthy follow-up periods, we know that osteoarthritis of the hip will appear in almost 50% of cases. Given this panorama of poor outcomes, the orthopaedic community around the world has become

more inclined toward intervention, hoping to achieve a more spherical and congruent hip at the end of the growth period. In an attempt to favourably alter the natural course of the disease, they are less and less tolerant of “small” joint deformities.

Some surgical techniques that are now in utter disuse were once performed routinely in the majority of cases—adductor tenotomy, for example, which came to be used less and less because it failed to restore mobility in the medium term. Contracture of the hip refers to the involuntary contraction, in response to joint mechanoreceptors, of the *entire* musculature—not just contracture of the *adductor longus*. The *adductor longus* is the most superficial and, therefore, the one most easily detected on palpation. Simply sectioning this muscle does not make the rest of the synergistic musculature relax. Besides, the clinical improvement could be due to the enforced post-operative rest and then the time spent in a rigid abduction system, whether cast or splint.

Tenotomy progresses toward a new contracture—the muscle becomes anchored again, and the contracture reappears. In our 432-case series, 31 of them underwent tenotomy. The indications for it were according to each surgeon's preference but always included an abduction of 20–30° less than the healthy side. The results were that, in 28 cases, improvement lasted a mean of 4.60 months (range 1–12; SD 2.9; mode 3), understanding that the patient was immobilized in a Petrie cast for 1.5 months. In only 2 of the 31 patients did the improvement persist the entire time. In the 1 remaining case, the patient underwent another tenotomy 9 months after the first one, and the contracture again recurred.

Lastly, I would like to comment on the trochanteric epiphyseodesis issue. Shah et al.² recently published research that has changed how we handle trochanteric overgrowth cases.

Traditionally, we surgeons used this slowing technique on patients under 8 years of age, just as the Spanish authors explain. However, this important research from India has established that epiphyseodesis is effective in children older than this. Dr. Shah and colleagues have shown that this technique is effective in 80% of children 8–9 years of age; in 50% of patients between 8.5 and 10 years of age; and in up to 30% of patients 10–11 years old.

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It is clear from this data that epiphysiodesis is an effective treatment in children over 8 years of age, as well.

References

1. Rubio C, Abril JC. Incidencia de la enfermedad de Legg-Calvé-Perthes en el área 2 de Madrid 1994–2010. In: Comunicación SEOT. 2011.
2. Shah H, Siddesh ND, Joseph B, Nair SN. Effect of prophylactic trochanteric epiphysiodesis in older children with Perthes' disease. *J Pediatr Orthop*. 2009;29:889–95.

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Reply from the authors[☆]

Respuesta de los autores

Sir,

We would like to thank Dr. Abril for his interesting comments on certain aspects of Perthes disease dealt with in our article, as we are pleased to share opinions and encourage debate with other colleagues in our speciality.

Adductor tenotomy is considered a "coadjuvant" treatment of the disease, and not always necessary, which seeks to re-establish to the maximum the joint mobility that is so important for remodelling the proximal femoral epiphysis. Consequently, it should not be applied as a sole and permanent technique to treat the disease, but within a series of surgical movements as required by the patient, knowing that, in fact, there is a proportion of cases that could present a recurrence of the contracture.

We have reviewed the article by Drs. Shah, Siddesh and Benjamin Joseph with respect to epiphysiodesis of the greater trochanter. These authors perform this procedure preventively in patients who have been subject to a femoral

varus osteotomy. They, therefore, study the technique's effect as a preventative treatment, which is before overgrowth of the trochanter is produced. That is why it is possible that in many cases the damage in the proximal femoral physis may not have yet occurred at the time of surgery. In this argument, the authors find a possible explanation of their good results.

The studies that examine the efficacy of this technique as a treatment once the damage to the physis has occurred show a clear decrease when the operation is carried out after the age of 8 years (Schneidmueller D, Carstens C, Thompson M. Surgical treatment of overgrowth of the greater trochanter in children and adolescents. *J Pediatr Orthop*. 2006;26:486–90). Given that age is the only variable that the surgeon can control, we consider it prudent to establish as a general rule an age limit of 8 years for performing an epiphysiodesis of the trochanter with the best guarantees.

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