

Name:	Granados, Leo (Itoya)	DOS:	04/11/2014
DOB:	03/09/2014	Chart:	
Physician:	Dror Paley, MD, FRCSC	Ref. Phy:	

CONSULTATION

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History of Present Illness:

Leo is a newborn baby who I am seeing today in Madrid, Spain in consultation regarding left congenital femoral deficiency. The problem was identified in utero and has not been associated with any other congenital problems. Leo presents today with evidence of 5.1 cm discrepancy between both femora with equal length tibiae. He is otherwise well formed with normal head, neck, upper extremities, spine, and right lower limb. He was born full term with no complications.

Physical Examination:

Extremities: On examination today, he has an obvious short left femur and mobile hip joint and knee joint. He has mild flexion deformity of both knees which is typical of neonate and mild flexion deformity of both hips, slightly more on the left than the right.

Radiographic Findings:

Radiographic examination demonstrates acetabulum present bilaterally in a very short left femur with a subtrochanteric delayed ossification line. There is obviously no ossification in the region of both femoral heads and femoral necks due to his neonatal age. Ultrasound does demonstrate a hypoplastic-sized femoral head on the left side, but it is unclear whether there is a femoral neck connection to the femur.

Impression:

Based on the above findings at this time, Leo's diagnosis would be classified as congenital femoral deficiency Paley type 1B or type 2. More time to develop ossification is required before further classification can be done. If no ossification is sufficient to make such diagnosis develops between now and age 1, I would recommend a magnetic resonance imaging under sedation to be performed in order to determine if there is a true femoral pseudoarthrosis or not.

To examination, his hip moves extremely well and does not seem unstable and his knee moves extremely well and does not seem unstable. My impression thus far is that this is more likely a type 1B than a type 2.

Recommendations and Treatment:

Leo's recommended treatment will involve a preparatory surgery for the left hip and possibly left knee. This preparatory surgery will depend on the pathology of the hip and knee. If this is type 1B meaning that there is a cartilaginous connection between the femoral head and femoral Shaft (in other words no pseudoarthrosis) and that this connection has delayed ossification and deformity than the treatment is to perform a super hip 1 procedure between the ages of 2 and 3 years. If on the other hand the Magnetic resonance imaging shows that there is no cartilaginous connection between the two than the preparatory surgery would be a super hip 2 procedure. Leo's parents have researched my website and other writing of mine regarding these two procedures and have a good understanding of what is involved with both of these operations and what the purpose of these operations is in



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order to achieve a stable ossified femoral head and neck shaft unit in an undeformed position.

At this point, further recommendations regarding which of these two procedures has required is speculative. I will wait to receive the MRI imaging and further x-rays at 6 and 12 months before trying to make a more definitive diagnosis.

We also discussed subsequent lengthening that will be required as Leo grows. His leg length discrepancy measures 5 cm which translated to skeletal maturity will equal approximately 25 cm of limb length discrepancy at maturity. If this projection is correct then Leo will require minimum of three lengthenings and maximum of four lengthenings. This may also be supplemented with epiphysiodesis of the contralateral side. We are able to achieve between 5 to 8 cm with each limb lengthening procedure. The first limb lengthening procedure following a super hip 1 would be performed around age 4 with a specialized fixator extending from the femur and articulated across to the tibia to protect the knee joint. Between 5 to 8 months of external fixation are required for 5 to 8 cm of lengthening. This treatment would necessitate them being in the United States between three to four months. The second lengthening will typically be four years later around age 8 and the third lengthening four years later around the age 12. With the new implantable limb lengthening technology, we can achieve 5 to 8 cm of lengthening at each of those ages with internal devices instead of external devices. It is premature to discuss those lengthenings at this early stage. If epiphysiodesis is required, it is typically performed around age 13.

I will stay in contact with Leo's family and await the six-month age x-rays. We will formulate a plan and also prepare a cost estimates for them in the future so that they can plan such treatment. We did discuss the options of doing surgery in Europe versus at the Paley Institute in Florida. We will get into more details regarding that as we get closer to the planned date of surgery.

Lastly, I did emphasized to them that if this is a type 2 then the plan will have to be pushed forward a couple of years because the super hip 2 cannot be performed at age 2 but needs to be performed closer to age 4.

It was a pleasure meeting with Leo's parents who are obviously intelligently informed individuals who have done their homework regarding this condition. We will remain in contact with them over the coming years.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Paley", is written over a white rectangular box.

Dror Paley, MD, FRCSC

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