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" وَقُلْ رَبِّ زِدْنِي عِلْمًا "

صدق الله العظيم

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قطع العظم جراحياً حول مفصل الفخذ في الأطفال

رسالة
توطئة للحصول على درجة الماجستير في جراحة العظام
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المقدمة

يلعب قطع العظم جراحيا لعظام الحوض والجزء العلوى لعظمة الفخذ دورا مفيدا وثابتا فى علاج المشاكل النمائية وما بعد إصابات مفصل الفخذ. ويستخدم قطع العظم الدورانى لعظام الحوض وقطع العظم ما بين المدورين لعلاج معظم الحالات التى لها علاقة بالخلل النموى لمفصل الفخذ. والجدير بالذكر أن قطع العظم ما حول الحق (قطع جانز) يعتبر ضرورى ومؤثر فى قطع العظم الحوضى. وهناك أيضا طرق أخرى ناجحة مثل القطع المجاور للمفصل والقطع الثلاثى.

وينقسم قطع عظمة الفخذ إلى فحاجى أو رواحى وذلك حسب الشكل الهندسى للجزء القريب لعظمة الفخذ. ويمكن إضافة التصلیحات الدورانية والطولية والتاجية غير المستوية وذلك لتحسين القوى البيوميكانيكية والتحميل الغضروفى وعدم التكافؤ الطولى.

ويستخدم قطع العظم الفحاجى ما بين المدورين لعلاج المفصل الرواحى الذى يصاحبه خلل نموى بسيط وعدم التكافؤ الطولى للطرف السفلى ويستخدم أيضا فى حالات معينة من مرض بيرسز.

ويعتبر إزاحة عظمة الفخذ للداخل جزء مهم فى قطع العظم الفحاجى ما بين المدورين.

قطع العظم الفحاجى ما بين المدورين نادرا ما يستخدم الآن فى الخلل النموى فيما عدا بعض حالات الخلل النموى البسيط الذى يصاحبه عدم تكافؤ طول الطرف السفلى ومعه زاوية عنق مرتفعة. ويمكن إضافة قطع العظم الرواحى ما بين المدورين لتصلیح الجزء القريب الغير سوى لعظمة الفخذ.

قطع العظم الحوضى إما قطع العظم البنائى أو قطع العظم الإستعواضى.

قطع العظم البنائى يعيد بناء حق مفصل الفخذ بالنسبة لرأس عظمة الفخذ. لذلك فإن عظمة الفخذ تتمفصل مع الغضروف الحقى بعد قطع العظم. وقبل إعداد المرضى للجراحة يجب أن يكون المفصل متطابق

والخلع الجزئى الثابت حر الحركة ومحدد الموضع بالنسبة لحق مفصل
الفخذ.

ويدعم قطع العظم الإستعواضى رأس عظمة الفخذ ولكن يتم ذلك عن طريق محفظة مفصل الفخذ لذلك عظمة الفخذ تتمفصل مع (الكيس) الكبسولة اللبغية عوضا عن الغضروف الحقى. يجب إستخدام قطع العظم البنائى فى الحالات التى يمكن فيها تحديد اتجاه حق مفصل الفخذ بالنسبة لرأس عظمة الفخذ. ومع ذلك ففى حالة عدم تطابق رأس عظمة الفخذ وحق مفصل الفخذ أو وجود خلل نموى مع وجود تغيرات ضمورية فإنه يجب إضافة قطع العظم الإستعواضى إلى قطع العظم البنائى.

Aim of the work

The aim of this work is to provide a review of literature about Indications, Techniques and Complications of osteotomies around the hip in children.

Acknowledgement

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Introduction

Osteotomies of the pelvic bone and upper femur play a useful and enduring role in the overall management of posttraumatic and developmental conditions of the hip. Rotational osteotomies of the pelvic bone and intertrochantric osteotomies for treatment of most dysplasia-related conditions have supplanted. In particular, the Bernese (Ganz) periacetabular osteotomy with lateral muscle sparing has emerged as the most effective and widely used pelvic osteotomy. Other methods, such as Tonnis juxta-articular and triple innominate osteotomies, also can be successful (*Santore et al; 2006*).

Femoral osteotomies generally are classified as varus or valgus, referring to the final geometry of the proximal femur. Corrections of rotation, length and coronal plane abnormalities can be added to improve biomechanical forces, cartilage loading, and length inequalities.

Isolated varus intertrochanteric osteotomies are indicated for coxa valga with mild dysplasia and leg-length discrepancy (ipsilateral leg longer), and in certain cases of Perthes disease (flexion or flexion-varus) (*Millis et al; 1996*).

Medial displacement of the femoral shaft has been suggested as the most important part of a varus intertrochanteric osteotomy (*Miegel and Harris, 1984*).

Isolated varus intertrochanteric osteotomy for dysplasia rarely is done now, with the exception of cases of combined high neck-shaft angle with an ipsilateral long leg in the face of mild

dysplasia. Correction of proximal femoral deformity also may be achieved using the valgus intertrochanteric osteotomy (*Turgeon et al; 2005*).

Pelvic osteotomies may be either reconstructive or salvage one. Reconstructive osteotomies of the pelvis reorient the acetabulum relative to the femoral head. The femur continues to articulate with hyaline cartilage after the osteotomy. As such, the joint must be shown to be congruous, free of fixed subluxation, and located in the natural acetabulum before patients are considered for surgery. Salvage osteotomies provide additional support to the femoral head but do so through the hip capsule. As such, the femur articulates with fibrocartilage rather than hyaline cartilage. For cases in which the acetabulum could be redirected over the femoral head, a reconstructive osteotomy should be considered. However, if incongruity of the femoral head and acetabulum is present or dysplasia with degenerative changes too advanced for reconstruction, salvage may be indicated (*Turgeon et al; 2005*).

الهدف من الدراسة

الهدف من هذا العمل هو إلقاء الضوء حول إستخدامات وطرق ومضاعفات قطع العظم جراحيا حول مفصل الفخذ في الأطفال.

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٣. الإعتبارات البيوميكانيكية لمفصل الفخذ.
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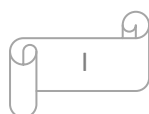


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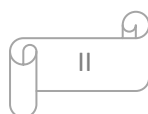


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