

Evaluasi penyembuhan tulang dan perbandingan luaran fungsional pasca tindakan injeksi perkutaneus steroid dan kuretase dengan hidroksiapatit pada simple bone cyst = Evaluation of bone healing and comparison of functional outcome of simple bone cyst after percutaneous steroid injection and curettage with hydroxyapatite

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Abstrak

ABSTRAK
Latar Belakang: Simple bone cyst (SBC) adalah tumor tulang jinak, berisi cairan. Tujuan utama terapi SBC adalah mendapatkan penyembuhan tulang, mencegah fraktur patologis, dan manajemen gejala khususnya nyeri. Terdapat berbagai metode pengobatan SBC, namun saat ini masih kontroversial karena angka kesembuhan dan tingkat invasi operasi. Terapi injeksi perkutaneus steroid merupakan metode operasi dengan tingkat invasi rendah sehingga penyembuhan tulang dan luaran fungsional lebih baik.

Metode: Total terdapat 10 pasien (6 laki-laki, 4 perempuan, rerata usia 13 tahun) SBC yang terbagi dalam dua kelompok. 5 pasien (proksimal femur 3; proksimal humerus 1; calcaneus 1) dilakukan terapi injeksi perkutaneus steroid dan 5 pasien (proksimal femur 2; proksimal humerus 2, radius 1) terapi kuretase dengan hidroksiapatit. Injeksi perkutaneus steroid dilakukan sebanyak tiga kali dengan interval waktu tiap satu bulan. Rerata follow up adalah 12-26 bulan. Evaluasi penyembuhan tulang dinilai secara radiologi dengan kriteria Chang dkk. Luaran fungsional dinilai berdasarkan skor MSTS.

Hasil: Penyembuhan tulang komplit didapatkan pada kedua kelompok, namun solid union lebih cepat terjadi pada kelompok terapi injeksi perkutaneus steroid. Luaran fungsional didapatkan nilai yang lebih baik pada kelompok injeksi perkutaneus steroid terutama pada bulan ke-3 (55%) dan ke-6 (84%) pasca operasi berdasarkan skor MSTS dibandingkan terapi kuretase dengan hidroksiapatit (bulan ke-3 47% dan ke-6 69,3%).

Simpulan: Terapi injeksi perkutaneus steroid masih tetap menjadi pilihan utama metode terapi SBC dengan solid union lebih cepat, tingkat prosedur operasi invasi rendah, lebih mudah, efektif, dan aman.

ABSTRACT
Background: Simple bone cysts (SBC) are a benign bone tumor, fluid-filled. The main goals of the therapy are to get the bone healing, prevent pathological fractures, and management of pain symptom. There are various methods of the SBC treatment, however still remains controversial because of their healing rate and invasiveness of surgery.

Steroid injection therapy is a surgical procedure with a low level of invasiveness so that better bone healing and functional outcomes.

Methods: A total of 10 patients (6 males, 4 females, mean age 13 year) SBC were divided into two groups. 5 patients (proximal femur 3; proximal humerus 1; calcaneus 1) performed percutaneous steroid injection therapy and 5 patients (proximal femur 2; 2 proximal humerus, radius 1) performed curettage with hydroxyapatite therapy. Percutaneous steroid injection was performed three times at intervals of each month. The mean follow-up of 12-26 months. Evaluation of bone healing radiological assessed by Chang criteria and the functional outcome by MSTTS score.

Results: Complete bone healing was found in both group, but solid union occurred faster in steroid injection therapy group. The functional outcomes found better value in the steroid injection therapy group, particularly at 3 months (55%) and 6 months (84%) than curettage with hydroxyapatite therapy (3 months 47% and 6 months 69,3%) post operation based on MSTTS score.

Conclusions: Percutaneous steroid injection therapy is still the main choice of SBC treatment with faster solid union, a lower level operating procedures invasion, easy, effective, and safe.;Background: Simple bone cysts (SBC) are a benign bone tumor, fluid-filled. The main goals of the therapy are to get the bone healing, prevent pathological fractures, and management of pain symptom. There are various methods of the SBC treatment, however still remains controversial because of their healing rate and invasiveness of surgery. Steroid injection therapy is a surgical procedure with a low level of invasiveness so that better bone healing and functional outcomes.

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