What is the best treatment for Osgood-Schlatter's disease?

Evidence-Based Answer

Most patients with Osgood-Schlatter's disease (OSD) have symptomatic relief from conservative treatment (activity modification, rest, ice, nonsteroidal anti-inflammatory drugs [NSAIDs]) (SOR: B, prospective cohort and case series). Surgical treatment is rarely required, but may be beneficial in skeletally mature patients with symptoms despite conservative measures (SOR: C, case series).

A prospective Saudi Arabian cohort study reported on the effectiveness of conservative or surgical treatment in 261 patients with 1–2 years of OSD (97% males; average age of 16).1 Conservative treatment consisted of activity modification, rest, and NSAIDs. Overall, 91% of patients responded well to conservative treatment. Twenty-four patients (9%) underwent surgery: 3 were bilateral surgeries and all returned to normal activity after 3–6 weeks without complications. A limitation of this study is that “responded well” was not explicitly defined.

A retrospective case series of 118 patients with clinical and radiographic documentation of OSD found that 88% of those treated nonoperatively with intermittent activity limitation or immobilization in a cylinder cast reported improved pain or healing at follow-up.2 Approximately 12% of patients showed no improvement and underwent surgical excision of an ossicle, some combined with a tubercle-thinning procedure. The mean age at surgery was 14.3 years for female patients and 17 for male patients. All but 1 patient had complete relief of symptoms and returned to full activity at 6 weeks.

A retrospective analysis of 107 military recruits who had surgery for unresolved OSD sought to assess long-term outcomes.3 Surgery was recommended if the patient had radiographic and clinical evidence of OSD, a duration of symptoms long enough to demonstrate severity, if the patient could not continue military training because of failing conservative treatment, or if the patient was unable to kneel or squat without persistent pain during military service. Key outcomes included the Kujala scale (a 13-item knee-specific self-report questionnaire with a scale of 0–100; 95–100 points is considered excellent) and a 100-mm visual analog pain scale (VAS).

After a 10-year follow-up, 87% reported they could participate without restriction in daily work activities (median Kujala score 95 and median VAS score of 7 mm). Seventy-five percent of patients regained their preoperative sports activity level. Thirty-eight percent reported an ability to kneel without pain. Minor postoperative complications occurred with 6 patients, and 2 patients required reoperation.4

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What treatments are effective for chronic prostatitis?

Evidence-Based Answer

Alpha-blockers, antibiotics, or a combination of the 2 are effective treatment options for chronic prostatitis (SOR: A, systematic review of RCTs). Silodosin also reduces chronic prostatitis symptoms. Dutasteride improves prostatitis-related symptoms in older men who have an increased prostate-specific antigen level and negative biopsies (SOR: B, single RCTs).

A systematic review and meta-analysis in 2011 reviewed 23 RCTs (N=2,315) comparing chronic prostatitis symptom scores and treatment response among multiple therapies.1 Mean ages of participants were from 29 to 56 years, with treatment duration from 4 to 52 weeks.

Compared with placebo, mean total National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI) scores (which range from 0 to 43) at follow-up were significantly lower for alpha-blockers (5 trials, N=568; weighted mean difference [WMD] −11.0; 95% CI, −14 to −8.1), antibiotics (3 trials, N=215; WMD −9.8; 95% CI, −15 to −4.6), alpha-blockers plus antibiotics (3 trials, N=382; WMD −14; 95% CI, −18 to −10), and finasteride (2 trials, N=105; WMD −4.6; 95% CI, −8.7 to −0.5). Alpha-blockers plus antibiotics were better than any other therapy and were significantly better than alpha-blockers alone (13 trials, N=1,541; WMD −2.9; 95% CI, −5.2 to −0.5).1
A separate RCT compared silodosin with placebo in symptom relief in chronic prostatitis, randomizing 151 patients to receive silodosin 4 mg, silodosin 8 mg, or placebo for 12 weeks. Silodosin 4 mg was associated with a significantly larger decrease in NIH-CPSI score compared with placebo (–12 vs –8.5; \(P=.02\)). There were no additional treatment benefits with the 8-mg dose.

Another RCT evaluated the efficacy of dutasteride for prostatitis symptoms in 5,379 men with elevated PSA and negative prostate biopsy. After 48 months of taking either dutasteride 0.5 mg/d or placebo, there were modest but statistically significant differences in total NIH-CPSI scores for the dutasteride group (0.038 vs +0.92; \(P<.0001\)).

Finally, a RCT evaluated the effectiveness of pregabalin in reducing chronic prostatitis symptoms. The trial enrolled 324 men with symptoms who were randomized to pregabalin titrated up to 600 mg/d or placebo for 6 weeks. The pregabalin group did not have significantly more patients with at least a 6-point decrease in NIH-CPSI score at 6 weeks compared with placebo (47% vs 38%; \(P=.07\)).


Are inhaled steroids effective in treating a postviral cough?

Evidence-Based Answer
No. Inhaled corticosteroids do not appear to be effective in reducing postviral cough (SOR: B, small RCTs).

A small prospective RCT from Thailand examined the effectiveness of inhaled budesonide (400-mcg puff BID) in 30 nonasthmatic, nonsmoking adults with persistent post-upper respiratory infection (URI) cough lasting more than 3 weeks. Both a subjective symptom score (1–18 points) and pulmonary function tests were used to assess effectiveness of treatment at 2 and 4 weeks after treatment.

There was no difference in the mean change of symptom score from baseline to 2 weeks (1.6 in the budesonide group vs 1.3 in the placebo group; \(P=.33\)) or from baseline to 4 weeks (1.4 vs 1.0, respectively; \(P=.33\)). Similarly, the 2 groups showed no significant difference in forced expiratory volume in 1 second (FEV1), forced vital capacity, or forced expiratory flow after 4 weeks of treatment.

A double-blind placebo-controlled RCT of 56 adolescents in Korea evaluated the change in methacholine dosing necessary to produce a 20% fall in FEV1 with the use of inhaled corticosteroids or placebo post-URI. Patients were included if they had a previous diagnosis of asthma but no use of asthma medications in 2 years, a baseline FEV1 >70% of predicted, and a concentration of methacholine producing a 20% fall in FEV1 <8 mg/mL.

These patients were divided into an experimental group who received inhaled budesonide two 200-mcg puffs BID and a placebo group who received two 500-mcg puffs BID of micronized lactose. Every 3 months over a 9-month period, every patient underwent spirometry and a methacholine challenge test. The budesonide group did not show a statistically significant change in bronchial hyperresponsiveness or in FEV1 compared with the placebo group.

A Cochrane review of 5 RCTs (N=339) examined the effectiveness (primarily defined as decreasing use of oral steroids or emergency department visits) of inhaled steroids in children with episodic viral wheeze and no history of asthma. One trial described in the review found that nebulized budesonide (400 mg 4 times a day ×2 days, then BID ×7 days) in 52 children with viral-induced wheeze resulted in a decrease in a lower respiratory symptom score (weighted mean difference –0.17; 95% CI, –0.34 to –0.003) compared with placebo. However, cough was not specifically discussed.