Subcutaneous calcifications complicate various diseases, and their treatments are challenging. Several studies have recently demonstrated the potential of sodium thiosulfate (STS) in the treatment of ectopic calcifications. STS has generally been administered intravenously, and potential systemic adverse effects are still a concern. A 12-year-old boy with familial tumoral calcinosis syndrome due to GALNT3 mutation recently presented to us with a large subcutaneous calcification on the posterior surface of the left elbow, which had developed over the 4 previous months (A). The overlying skin was normal, but mobility of the elbow was reduced. Physical examination and technetium scintigraphy revealed no other ectopic calcifications. Given the patient’s functional impairment and the potential limits of surgical treatment, percutaneous treatment with STS was initiated. The preparation was made of STS dispersed in Galen’s cerate (10/90 [weight/weight]). The patient applied 1.5 gm of the treatment locally every evening for 6 months. During this period, he noticed progressive waning of the mass and no skin modification or discharge. Radiography confirmed the improvement (B). Neither local nor systemic adverse effects were reported or seen. Local application of STS could be an interesting alternative to systemic administration, with fewer adverse effects. Two cases of successful treatment of dystrophic microscopic calcifications with cutaneous STS have been described (1,2). Unlike these previous cases, our patient presented with an ectopic calcification with no skin lesions, and no other treatment was received. The initial size of the calcification, the dramatic improvement, and the good evolution during such a short period of time lead us to believe this outcome could hardly be spontaneous. A prospective trial will be conducted to confirm this promising preliminary result.