Multi-Modal Treatment Of Calciphylaxis With Sodium-Thiosulfate, Cinacalcet And Sevelamer Including Long-Term Data

Abstract:

Background: Calciphylaxis is a rare, yet life-threatening disease mainly occurring in dialysis patients. Traditional options of treatment remain unsatisfactory. Methods: Here we present a novel, combined approach, treating calciphylaxis with IV sodium thiosulfate, cinacalcet and sevelamer. In a case series five hemodialysis patients, have been successfully treated with this regimen. Treatment and survival data were analyzed using descriptive statistics. Results: In all patients, a rapid decrease in pain, improvement of general condition and wound healing within six months occurred. Side effects were low. Drug dosages: IV sodium thiosulfate initial dose 119.4 +/- 84.9 g/m²/week, maintenance dose 40.6 +/- 9 g/m²/week; cinacalcet: maintenance dose 36 +/- 32.9 mg/d and sevelamer maintenance dose 3320 +/- 1671 mg/d. One and two year survivals were 100 % and 80 %, respectively. We also report on long-term application of IV sodium thiosulfate of up to 52 months. Patient survival after diagnosis was 52, 84, 21, 36 and 30 months, respectively. Survival since initiation of hemodialysis was 76, 136, 89, 36 and 35 months, respectively. Conclusion: This novel combined approach, a multi-modal treatment of calciphylaxis with persistent hyperparathyroidism, using IV sodium thiosulfate, cinacalcet and sevelamer seems to improve the outcome of this