

CALCEMIC UREMIC ARTERIOLOPATHY -WIDE EXCISION IS A PROMISING CURATIVE APPROACH: CASE REPORT AND LITERATURE REVIEW.

Deepak Jasuja ,Thomas Powell ,Alice Rocke and Donna Finegan , University of Pittsburgh, Pittsburgh, PA, USA

Calcemic Uremic Arteriopathy (CUA) is a rare but devastating condition in patients with chronic renal insufficiency with mortality between 60-80 %. It is associated with increased phosphorus levels (>5.5 mg/dl), Calcium x Phosphorus product (>70 mg/dl), secondary hyperparathyroidism and a hypercoagulable state. Pathology involves calcification of media of small and subcutaneous arteries, intimal hyperplasia and intravascular thrombosis leading to necrosis and ulceration associated with severe pain and hyperaesthesia.

Prompt diagnosis is vital to prevent sepsis and ischemic complications. Treatment options for this poorly defined condition are limited and include diet, binders, local wound care and parathyroidectomies in severe elevation of PTH (>500 pg/ml despite therapy). Newer approaches have been described including t-PA, hyperbaric oxygen and matrix metalloproteinases inhibitors.

We present a 64-year-old white female with history of End Stage Renal disease and Obesity, on Peritoneal Dialysis for two years, who presented with extensive bilateral Ant. Abdominal wall necrotic ulcers. Diagnosis of CUA was made clinically, confirmed later by biopsy. Although the patient had been noncompliant and her phosphorus and PTH levels were elevated at 5.5 mg/dl and 230 pg/ml, respectively, her Calcium x Phosphorus product was never above 70. She was put on strict dietary regimen and binders and then underwent surgical debridement and wide excision of both ulcers (11.5 x 8 x 2 inches each) up to the level of fascia. She then underwent split thickness skin grafts over both wounds. After seven months of intensive wound care and multiple complications, she has achieved complete closure of the wounds.

Surgical debridement has been earlier suggested to improve survival and prognosis (Weening et al / Kang et al).

In the absence of trials validating the optimal therapeutic approach to this potentially fatal entity, we propose that wide excision accompanied by aggressive multidisciplinary care should be the first line therapy for Calcemic Uremic Arteriopathy.