

Abstract 15**Angioplasty Is Effective In Treating Blue Toe Syndrome**

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Introduction: Blue toe syndrome is a manifestation of distal embolization associated with significant pain and risk of tissue loss. The recommended treatment options for this problem include patch angioplasty of the lesion or bypass with exclusion of the presumed source of emboli. Although focal arterial lesions can be effectively treated with angioplasty, it is unclear whether performing angioplasty in a lesion suspected of causing distal embolization might acutely worsen the condition and what long-term effects this would have in preventing future embolization. The purpose of this study was to evaluate the results of six patients with unilateral blue toe syndrome treated with percutaneous angioplasty.

Methods: During a five year period, a total of six patients were identified with unilateral blue toe syndrome. Ankle/brachial indices were obtained, followed by arteriography. The study group included three men and three women with an age range of 35 to 83 years. Their atherosclerotic risk factors included smoking (6/6), hypertension (4/6), diabetes mellitus (2/6) and hypercholesterolemia (1/6). One patient had a history of illicit drug use. The patients were followed clinically by repeat clinical examinations and vascular laboratory studies.

Results: Arteriography typically demonstrated a focal preocclusive lesion with thrombus at the distal end of the lesion. Angioplasty was technically successful in all cases. The ABI's increased following angioplasty (pre 0.82 +/- .08; post 1.02 +/- .09). The symptoms resolved in all six patients over the ensuing month, and there were no recurrences with a mean follow up of 15 months (range 4 to 23 months). There was one death at four months associated with a pre-existing colon carcinoma.

Conclusions: Unilateral arterial to arterial emboli were found in association with focal preocclusive lesions. Despite the presence of thrombus in some of these lesions, these patients were not acutely worse following angioplasty. There was good initial angiographic success in all cases. There was also hemodynamic improvement as shown by an improvement in the ankle/brachial indices. Although long-term follow up is not available, these intermediate results suggest that angioplasty should be considered a reasonable alternative to standard operative approaches for patients with blue toe syndrome associated with arterial to arterial embolization.