

**Abstract Text:**

**Therapy in Fluoroscopy-assisted Cardiac Interventional Procedure Induced Chronic Radiation Dermatitis**

**– Case Series in An Institutional Experience**

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**ABSTRACT**

**Background :** Increasing number of patients with extreme cardiac disease underwent minimal- invasive fluoroscopy-assisted cardiac intervention, which raised the ratio of severe skin complication and made chronic permanent radiation ulcers became a special part in outpatient department of plastic surgeon. No literatures discussed about the treatment details for this dilemma to our knowledge.

**Aim and Objectives :** The study focus on the management for chronic permanent skin effects, which had no response to topical agent and treatment.

**Materials and Methods :** This is a retrospective chart review series in a single institute. From August, 2012 to May, 2015, there were 11 patients received surgical intervention by plastic surgeon.

**Results :** 11 patients with diagnoses of chronic radiation ulcers were referred from cardiovascular specialists or dermatologist and all received surgical debridement. Through the experience of repetitive debridements and surgeries for the former four cases, we found that the adequate debridement area should include the whole radiation area peripherally and deep to muscle fascia vertically. During the course of treatment, case No. 4 suffered another cardiac episode and couldn't take further operation for wound resurfacing. Vacuum assisted wound closure (VAC) system was applied as an alternative therapy. Based on above finding, radical excision with immediate wound closure was performed on the following 7 patients, which revealed successful outcomes. One of them had an incidental contusion over the wound resulting in partial dehiscence and wound infection, and it recovered well after debridement and wound care. All these 11 patients completed whole course of 20 sessions hyperbaric oxygen therapy.

**Conclusion :** The ultimate therapy of refractory chronic permanent radiation ulcer is surgical debridement. One stage procedure of radical excision with immediate wound closure is the best solution for this special group in releasing their suffering and anesthetic risk.