

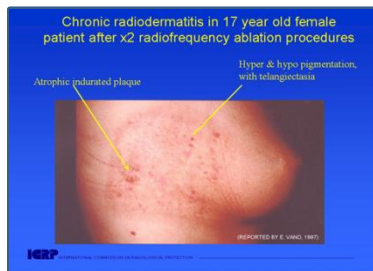
# The Impact of High Ionising Radiation Skin Doses on Patients Undergoing Complex Coronary Procedure



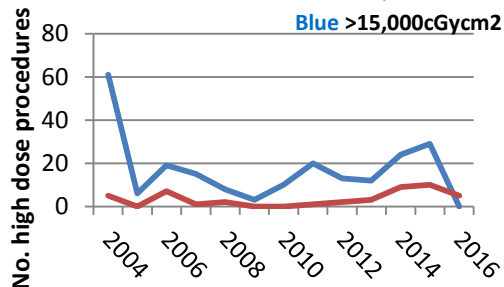
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The potential to cause skin injury, of the type shown below from high ionising radiation skin doses is well recognised. Radiation burns can take many months to manifest and the risk of missing these lesions is high. Complex cardiac procedures increase the risk of adding to this patient group. A new procedure was introduced to ensure we had a rigorous system in place to audit and care for this group of patients.

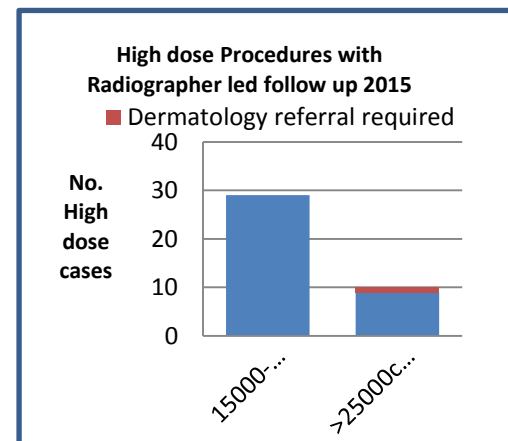


**HAREFIELD HIGH DOSE**  
2004-To date  
Red >25,000cGcm2  
Blue >15,000cGcm2



## New procedure:

- Patient recorded dose over 15,000cGcm2 (2-5Gy skin dose) reportable.
- High Dose form sent to Consultant, Imaging Manager, Radiation Protection chair. Alert placed on RIS for any subsequent dose within 2 months.
- Patient given skin care advise and leaflet.
- Medical physics risk assessment when dose over 25,000cGcm2 (>5Gy skin dose)
- Documented in patient notes and follow up for up to 1 year by radiographer.
- Database established and audited after 1 year.



## Conclusion:

In year 1 we have had 1 dermatology referral from a group of 10 patients with a radiation skin dose over 5Gy. This patient dose was >10Gy. At 24hrs and 3 months follow up nothing of note. At 6 months skin was itchy. Urgent dermatological referral diagnosed Seborrhoeic Keratosis with no worrying features. The importance of continued follow up is evident.

## Result:

The procedure has been modified to reflect the audit.

## Modified Procedure:

- Skin care leaflet is given to patients in the 15,000-25,000cGcm2 skin care group but no further follow up is instigated unless required.
- Patients with skin doses above 25,000cGcm2 (5Gy) are followed up as previously described.

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Acknowledgement :Photograph from the ICRP