Gaines, Anthony

From: Cann,Kari [KariCann@benefis.org]
Sent: Thursday, January 12, 2012 12:32 PM
To: Gaines, Anthony
Subject: Final report Benefis Hospital
Attachments: Final report Medical Event 1_5_2012.doc

Here is my final report. Please let me know if more information is required

Kari Cann, MS DABR
Medical Physicist/ RSO
Benefis Hospitals
Great Falls MT
406-788-7887

Radiation Safety Officer Report of Medical Event
which occurred on January 5, 2012 at 1523 hrs
Sletten Cancer Institute, Benefis Hospitals, Great Falls, Montana

NRC License number 25-12710001

Summary of Events:
On January 5, 2012, patient JM was treated with the HDR unit. The target was the distal esophagus approximately 29 cm from the incisors. The prescription dose was 700cGy to 1 cm depth. At the end of the procedure, the nasogastric tube and intraluminal brachytherapy catheter were removed as a unit and it was discovered that the brachytherapy catheter was not advanced to the end of the nasogastric tube by approximately 4cm. The clinical result was that the targeted area was not completely treated and a non target portion of the esophagus was treated. This qualifies as a Medical Event per the Nuclear Regulatory Commission (NRC) regulations 10 CFR Part 35.3045 section "(3) A dose to the skin or an organ or tissue other than the treatment site that exceed by 0.5Sv (50 rem) to and organ or tissue..."

At the time of the event, the physician did not feel that a Medical Event had occurred as there was potential for disease in the area that was treated. The RSO was notified by the Medical Physicist about the treatment after hours on January 6, 2012. The RSO, Department Manager and Medical Physicist (via telephone) met on January 9 to investigate the occurrence. At that time it was decided that this could be a Medical Event and the RSO called and reported it to the NRC operations Center at 2pm MST on January 9. The RSO also conferred with representatives of the NRC Region IV office (Jackie Cook) and confirmed that this incident satisfies the conditions of a Medical Event.

Licensee Name: Benefis Hospitals

Name of Prescribing Physician: Dr Jeffrey Stephenson, MD

Brief Description of the event: Please see above

Why the event occurred:
1) Misidentification of the distal end of the brachytherapy catheter due to radio-opaque markers in the nasogastric catheter.
2) Lack of familiarity with the nasogastric catheter and its radio opaque markers.

The effect, if any, on the individual who received the administration:
None. The physician does not feel that there will be adverse effects to the patient

What actions, if any, have been taken or are planned to prevent recurrence:
1) Future esophageal treatment will be done so that the brachytherapy catheter and the nasogastric tube are introduced to the patient as a unit and appropriate catheter length measurements will be done prior to the procedure
2) We are searching for a nasogastric catheter that does not have radio opaque markers

Certification that the licensee notified the individual:
Dr. Stephenson spoke to the patient and his family and this is documented in the Radiation Oncology Procedure note dated 01/05/12

Kari Cann, MS DABR
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