Hospital	Event Number: 45184
Rep Org: GAMMA KNIFE CENTER OF THE PACIFIC Licensee: GAMMA KNIFE CENTER OF THE PACIFIC Region: 4 City: HONOLULU State: HI County: License #: 53-1196602 Agreement: N Docket: NRC Notified By: RONALD FRICK HQ OPS Officer: DONALD NORWOOD	Notification Date: 07/03/2009 Notification Time: 18:42 [ET] Event Date: 07/02/2009 Event Time: 14:00 [HST] Last Update Date: 07/17/2009
Emergency Class: NON EMERGENCY 10 CFR Section: 35.3045(a)(3) - DOSE TO OTHER SITE > SPECIFIED LIMITS	Person (Organization): GREG PICK (R4DO) DUNCAN WHITE (FSME)

Event Text

MEDICAL EVENT - GAMMA KNIFE MISADMINISTRATION

A gamma knife treatment was prescribed for a patient being treated for multiple brain metastatic sites using an 8 mm collimator. The prescribed dose was 24 gray. The treatment was prescribed for 7 discrete sites in the brain. After the second discrete site had been treated it was found that an 18 mm collimator was being used to administer the treatment instead of the prescribed 8mm collimator.

After discovery, the collimator was changed to the 8 mm collimator. Treatment to the remaining 5 discrete sites was administered with the 8 mm collimator.

Both the patient and the patient's physician were notified of the use of the wrong collimator. The licensee states that there should be no clinical effects to the patient as a result of this misadministration.

The previous patient had been treated using the 18 mm collimator as the prescribed collimator.

Investigation into this event is continuing and a written report will follow.

In an effort to prevent recurrence, the licensee will send a notice to all authorized users, neurosurgeons and medical physicists that they should each independently check collimator size before each treatment is started.

A Medical Event may indicate potential problems in a medical facility's use of radioactive materials. It does not necessarily result in harm to the patient.

* * * UPDATE AT 1551 ON 7/17/2009 FROM RONALD FRICK TO MARK ABRAMOVITZ * * *

"The use of the 18 mm collimator instead of the 8 mm collimator increased the treatment site dose by 3%. The larger collimator caused the volume of each of the two treatment areas to increase by 2.35 cm3 [cubic centimeters]. This additional tissue received a dose of 24 Gy. If the correct collimator had been used, this tissue would have received a dose of approximately 4.3 Gy."

Both the physician and patient have been notified by the licensee.

Notified the R4DO (Gaddy) and FSME (Reis).