Danbury Hospital

Richard McKinley
U.S. Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

06-03544-01
03001274/2010001

Dear Mr. McKinley:

During your inspection of the HDR procedure, one of the pretreatment tests failed. The test was the disconnection of the connecting catheter to the patient device. The catheter was purposely disconnected an approximate distance of 2 mm. The expected outcome was that the source wire would sense the disconnection and retract. The result noted was that the source wire failed to sense the disconnection and delivered the expected dose, which in this case was 2 mm. shy of the expected position.

In discussion with the Nucletron engineer, Jeffrey Clay, this was not a defect, the unit acted correctly. The explanation given is that there are spring-loaded ball bearings in the head of the wire and unless the bearings extend fully, the wire would not retract. Therefore, the catheter needs to be totally disconnected from the patient apparatus so that the ball-bearings extend and the wire retracts. The answer to the question how would the unit know that the catheter and patient device is only partial disconnected is that the person attaching the device should be trained to know when the device is connected fully or partially.

Therefore, I am correcting my pretreatment tests, so that the catheter and patient device is totally disconnected to test whether the wire withdrawal functions correctly.

Sincerely,

David S. Wishko, Ph.D.

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