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The Art of Healing

January 24, 1991

Ms. Linda Kasner
Nuclear Materials Inspection Station
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Subject: Iridium seed slippage in implant ribbons

Dear Linda:

This letter is to detail our casual conversation on January 9, 1991 concerning iridium seed slippage in our implant ribbons.

On December 26, 1990 our physician performed a rectal implant with thirty-five ribbons of ten iridium seeds each. This implant remained in the patient for 24 hours and then was removed. After the ribbons were transported to our department, I began to individually place each ribbon back into the shipment lead pig. When I do this, I always look at the spacing of the sources because on two other occasions one or two sources have slipped slightly in the nylon ribbon. On this occasion I noticed one ribbon to have three sources near the tip source to be free-floating and two other ribbons to have one source free-floating. All of the other thirty-two ribbons were okay.

On approximately January 3, 1991 I contacted the source distributor known as Alpha-Omega, Inc. and informed them about this problem. They said that they were aware of this problem because the ends are not sealed from body fluids and no spacers are used to keep the sources from slipping. They said that they are working to correct this problem.

On January 8, 1991 I spoke with our teletherapy physicist and he informed me that he switched source distributors because of this same problem. The company that he purchases from now uses spacers between the sources and the nylon ribbon ends are sealed. This same company also sells a battery operated cutter and end sealer for nylon ribbons if the physician requests a shorter loading of seeds. I am presently pursuing this alternative.

On January 9, 1991 I contacted your office (Linda Kasner) with concern to this problem. You told me that if it changed my dosimetry by 10% that it would be a misadministration reportable to our hospital RSO. I explained that only six seeds out of 350 moved and that this would only change my dosimetry by no more than 2%. I also informed you that this slippage probably occurs when the physician pulls out the ribbons, but no one knows for sure.

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The real concern at hand is whether other institutions have had this same problem. You requested from me a letter detailing this incident so you can investigate this problem further from the source distributor to other institutions using their product.

On January 17, 1991 at our quarterly Radiation Safety Committee meeting, I informed our hospital RSO about this problem and also that I have been in contact with your office. They requested from me a copy of this letter so a record of this incident can be kept for their files and to pursue other avenues of corrective action.

Your concern in this matter is greatly appreciated.

Sincerely,

Harry Barker
RTT Dosimetrist

HB/pj

cc: George Ladd, M.D./RSO
Lawrence Cibula, M.D.
Ched Wetz, Administrative Director