FOIA/PA REQUEST
Case No: 96-494
Date Rec'd: 11-25-96
Action Off: Reed
Related Case:

November 20, 1996

Mr. Vincent S. Rufo
[redacted]

U.S.N.R.C.
F.O.I.A. - L.P.D.R. Branch
Mail Stop T6 - D8
Washington, D.C. 20555-0001

Attention: Russell A. Powell

I am writing to you to formally request documents under the "Freedom of Information Act." On October 21 and 22 1996, Dr. Nellam Bhalla conducted an inspection at the Hospital of the University of Pennsylvania, concerning an investigation that the Radiation Safety Office conducted. This investigation was about administering high and illegal doses of radiopharmaceuticals to patients. I am seeking all documents that were given to Dr. Bhalla during this inspection.

Sincerely,

[redacted]

Vincent S. Rufo

UNIVERSITY OF PENNSYLVANIA, RADIATION SAFETY OFFICE
INCIDENT RECORD

DATE: 2/11/93 TIME: 8:00 AM LOCATION: HUP nuclear medicine

LICENSEE: Dr. Abass Alavi

DESCRIPTION OF EVENT: During the week of 2/12/93 several events pointed to problems related to the permanency of official records. The RSO began an investigation immediately.

RSO ANALYSIS: The Radiation Safety Office has conducted an investigation that includes a thorough review of dose administration records, patient films, and electronic images/data. The compiled data neither proved or disproved the allegation. Since the initiation of this investigation, the RSO has had almost a daily presence in Nuclear Medicine observing procedures. In addition, a requirement that all dose calibrator readings be printed and attached to the patient's procedure request has been implemented, and most bone scan images have been archived electronically. Corrective actions have been implemented whereby scan times for anterior chest images are printed on films and recorded in log books, and a 20 minute scan time is required on the Prism 2000 camera.

SUMMARY OF ACTIONS TAKEN

Date	Initials	Action
2/10/93	LL	RSO finds a written directive that had been edited and not signed by an authorized user.
2/11/93	GWM	Dr. Mozely notifies RSO of possible dose administration problem.
2/11/93	LL	MDP dose administration records are checked.
2/15/93	GWM/WZ	Bone scan films for three months are checked for acquisition times. An RSO staff member is present during all data collection.
2/23/93	LL	RSO in-services nuclear medicine regarding record keeping.
3/4/93	MHS	Radiation Safety Committee is notified of on-going investigation.
3/17/93	MHS	RSO presents its findings to Radiology administration and Nuclear Medicine. Although the findings are inconclusive, it is decided that development of a protocol to prevent the improper dosing of patients is necessary. The RSO commits to develop this protocol.
3/23/93	GWM	A number of Nuc. Med. techs are interviewed regarding the allegations.
3/25/93	GWM	RSO meets with John Reilley to review its proposals for a protocol.
3/25/93	GWM	RSO reviews dose administration records from earlier in 1992.
3/26/93	MHS	MHS notifies NRC of investigation.
4/23/93	MHS	MHS gives in-service to nuclear medicine staff regarding findings of the investigation, falsification of records, and willful misconduct.
4/30/93	MHS	Corrective actions specified: log books for recording anterior chest imaging time, acquisition time for anterior chest images marked on film or images maintained electronically, 20 minute scan times for Prism 2000.

4/11
Item #1

Reports to regulatory agencies required? Yes: _____ No: ___X___

Health Physicist Approval: _____ Date: 5/26/93

Director Approval: _____ Date: 5/24/93

Executive Group Review Date: 5/25/93 Accepted Yes: ✓ No: _____

Rad Safety Comm Review Date: 6/3/93 Accepted Yes: ✓ No: _____

File Closed: 6/3/93

gm

From: MARK SELIKSON (2/11/93)
To: GEORGE MACDURMON
CC: JIM WOLFF
Subject: Time:9:20 AM
OFFICE MEMO call from mozely Date:2/11/93

please make note (hard copy of this in jims secured file) that I talked to Dr. Mozely this morning. He voiced concerns about falsification of records in clinical nuclear medicine and wanted to be advised of his ethical and legal responsibiolities in this matter. Please get a copy form McCue of the highlighted sections of the regs presenteed to the last EG and RSC meetings. Lets communicate them with mozely and schedule (or incorporate into a previosly scheduled) an inservice with the physicains, fellows and technologists on the gravity of record integrity.

FILE COPY

A/2

Item # 5

UNIVERSITY of PENNSYLVANIA

Radiation Safety Office
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Philadelphia, PA 19104-6021
215-898-7157
Fax: 215-898-0140

FILE COPY

MEMORANDUM

TO: Tom Grace

FROM: Mark Selikson

DATE: March 19, 1993

RE: March 18 Meeting regarding Nuclear Medicine dose administrations

A meeting was held in the Nuclear Medicine conference room on 3/18/93 to discuss allegations that some patient doses of MDP had been increased in order to speed up imaging time. The following individuals were present: Dr. Abass Alavi, Dr. David Mozely, Larry Ranahan, Ann Rufo, John Reilley, George MacDurmon, and myself.

My office has been conducting an investigation into these allegations since early February. Along with the full cooperation of the Nuclear Medicine Department, we have accumulated data on image acquisition time for MDP patients since November, 1992. Everyone agreed that there was no direct evidence of wrongdoing; however, it was decided to institute an appropriate administrative mechanism to ensure that, both now and in the future, any problem which occurs will be detected. The Radiation Safety Office will make a proposal in a timely fashion.

93-0197 GM/cl

A/3
Atmt 3
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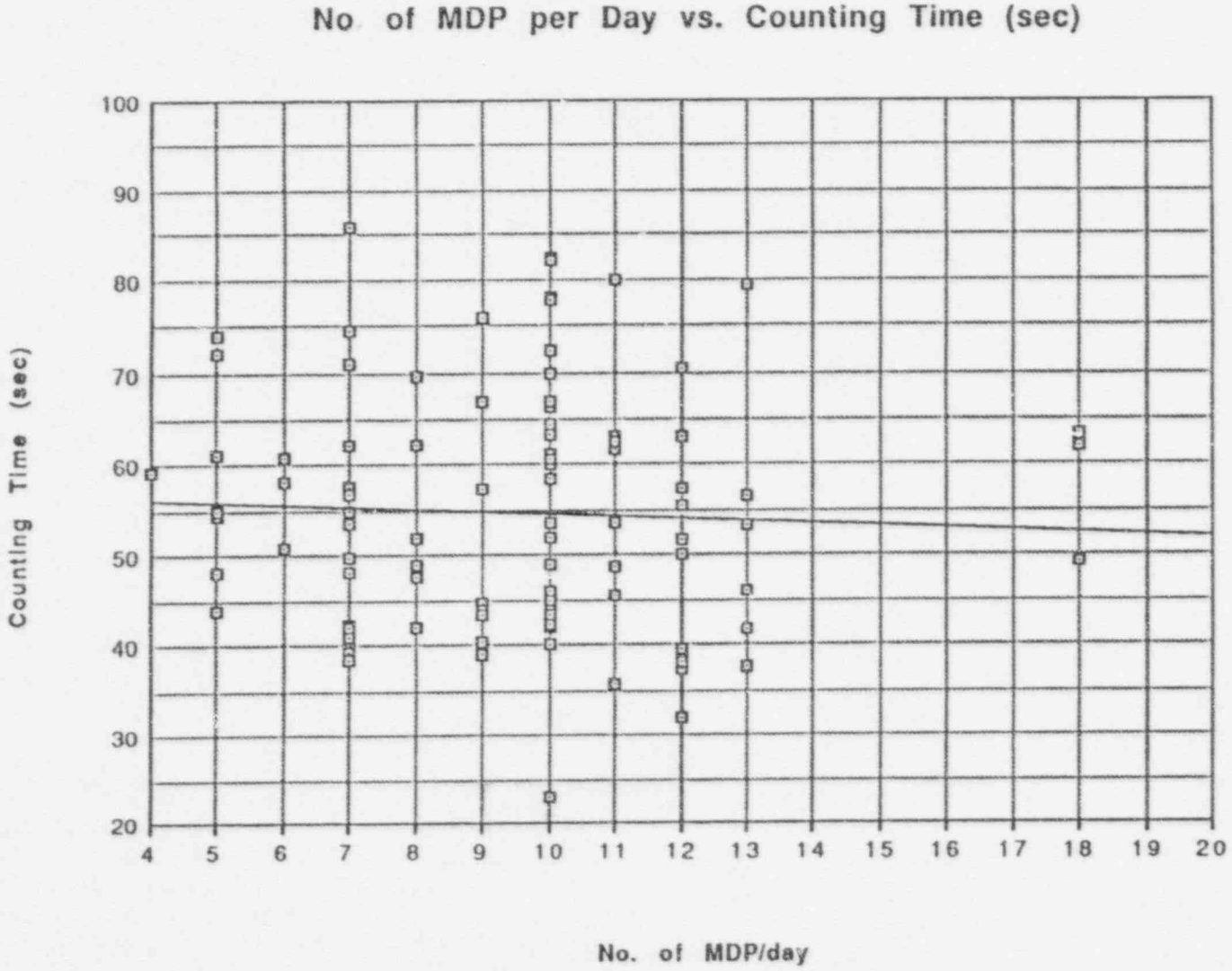
No of MDP per Day vs. Counting Time (sec)
Counting Time (sec)
100
90
80
70
60
50
40
30
20
4
5
6
7
8
9
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11
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15
16
17
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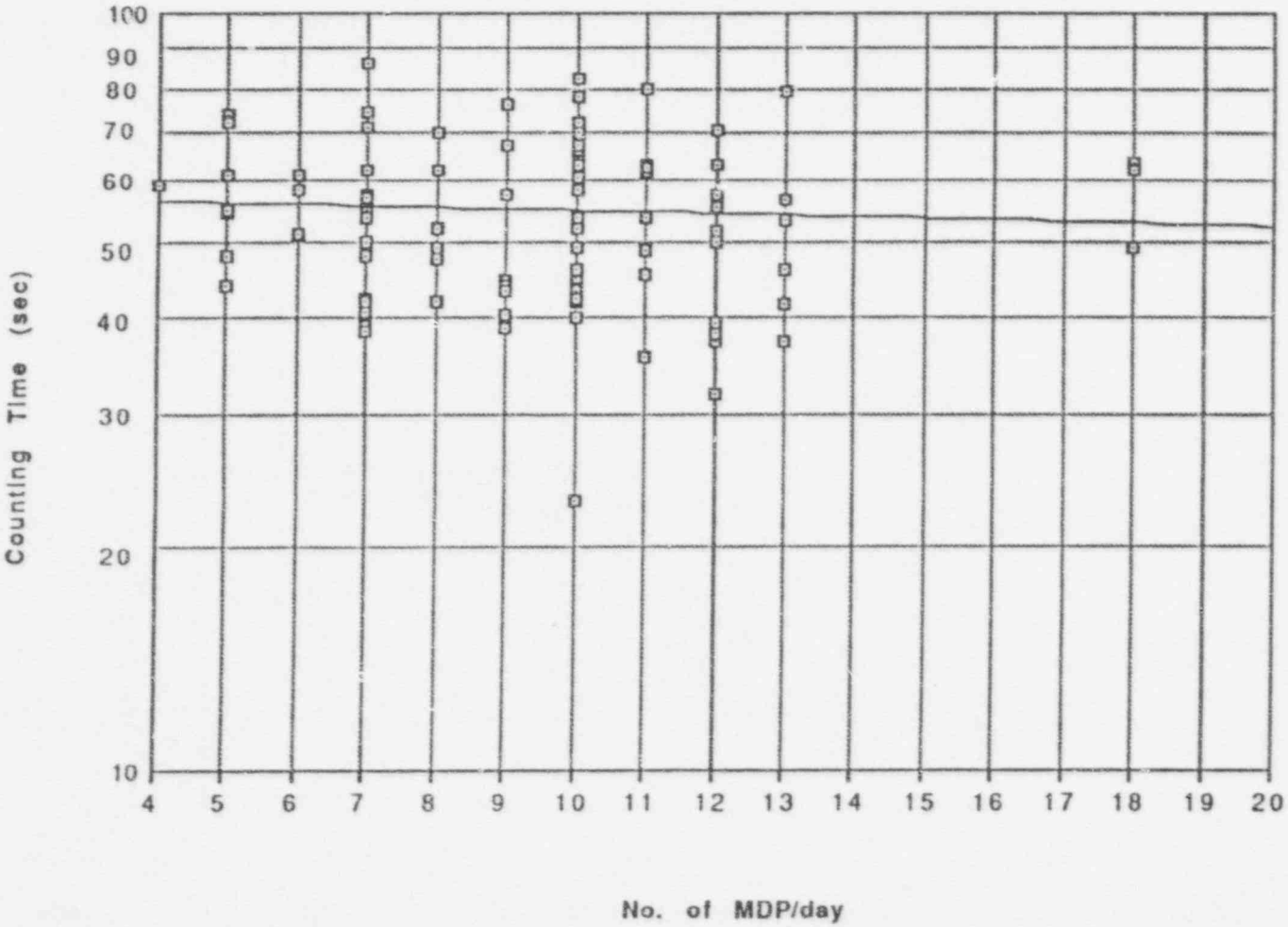
19
20
No. of MDP/day

No. of MDP per Day vs. Counting Time (sec)



Less than 6

Date	MDP	Total	Ct time (sec)	Avg (sec)	Ratio(S/L)
30-Dec	6.00E+00	1.90E+01	5.82E+01	5.96E+01	9.54E-01
			6.10E+01		
29-Dec	5.00E+00	1.30E+01	5.50E+01	6.45E+01	7.43E-01
			7.40E+01		
23-Dec	6.00E+00	2.20E+01	5.10E+01	5.10E+01	1.00E+00
22-Dec	5.00E+00	2.30E+01	4.40E+01	5.27E+01	7.18E-01
			6.13E+01		
10-Nov	5.00E+00		4.81E+01	4.81E+01	
12-Nov	5.00E+00		7.22E+01	7.22E+01	
27-Jan	5.00E+00		5.44E+01	5.44E+01	
8-Jan	4.00E+00		5.93E+01	5.93E+01	
		Average (sec):	5.80E+01		
		1 Stdev (sec):	9.19E+00		
		Upper Range(sec)	8.56E+01	3 stdv	
		Lower Range(sec)	3.05E+01	3 stdv	

			6.34E+01		
			6.20E+01		
1/21/93	11	24	5.36E+01	5.94E+01	
			6.30E+01		
			6.17E+01		
1/29/93	13	22	3.75E+01	3.75E+01	
		Average(sec):	5.49E+01		
		Stdve(sec):	1.37E+01		
		Upper Range(sec)	9.60E+01	3 stdv	
		Lower Range(sec)	1.38E+01	3 stdv	

University of Pennsylvania Medical Center
Hospital of the University of Pennsylvania
Intramural Correspondence

1 Silverstein **Department of Radiology** **662-7289**

TO: Mark Selikson, Ph.D.
Director, Radiation Safety

FROM: Larry A. Ranahan
Executive Director for Administration

RE: Radiopharmaceutical Administrations

DATE: April 14, 1993

Thank you for your memorandum of March 26th, regarding radiopharmaceutical administration issues in the Division of Nuclear Medicine. As was discussed in phone conversations with George McDermott on April 6th, and with yourself on April 13th, the following summarizes the Department's position regarding the recommendations provided by the Radiation Safety Office.

The first three options regarding the development of either an imaging network system, the allocation of a nuclear pharmacist, or the development of unit dosing from a central pharmacy are not practical, short-term alternatives to address the concerns raised. As a point of reference, the Department is developing an integrated PACS imaging network system which will eventually incorporate all sections and divisions of the Department, including Nuclear Medicine. However, based on resources available, and the complex development process in PACS imaging networks, we would not expect this to be implemented for at least several years at this time.

The more practical solution is encompassed in the second list of recommendations. The following steps have been taken:

1) The development and implementation of an enhanced logging system for all MDP scans, as well as other activities in Nuclear Medicine, has been put into place as of April 8th, 1993.

2) Protocols for scans performed on the Prism 2000 have been adjusted to meet the recommendations outlined as of March 1st, 1993.

3) The "upgrade" for the Picker 415, allowing for the recording of counts and acquisition times, on patient images has been installed and is operational at this time. Procedures have been put in place to insure that electronic/digital copies of all AP views will be retained in our image data base for a minimum of 30 days.

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Items 4

4) Regarding the implementation of a computerized Hot Lab, under a provision in our existing UHC agreement with Mallinckrodt, the software required to run such a Hot Lab is provided at no cost. The Department will be contacting at Mallinckrodt shortly so that negotiations can begin regarding the provision of the required personal computer. Alternatively, if this negotiation cannot be brought to a successful conclusion, the Department will approach the Hospital for contingent capital funding for the purchase of this device given the cost savings achieved by the implementation of this agreement.

All of the above steps should bring each of your recommendations into full implementation by the end of the current fiscal year, or by the date indicated. These comments have been reviewed with Dr. Baum, and the Department is in concurrence with your recommendations.

Please feel free to contact me at the above extension if you have any further questions or concerns regarding this issue. I will follow-up with your office within 45 days regarding the acquisition of the Hot Lab system.

LAR/ch
Suspend: June 1, 1993

cc: Abass Alavi
Stanley Baum, M.D.

UNIVERSITY of PENNSYLVANIA

Radiation Safety Office
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Philadelphia, PA 19104-6021
215-898-7187
Fax: 215-898-0140

FILE COPY

MEMORANDUM

TO: Larry Ranahan

FROM: Mark Selikson

DATE: March 26, 1993

RE: Radiopharmaceutical administrations

As a follow-up to our meeting on 3/17/93 regarding radiopharmaceutical administrations, please review the following options for increasing the level of control of patient doses.

- The Nuclear Medicine Department should acquire and store all images electronically on a network system.
- Employment of a registered nuclear pharmacist to prepare and dispense all radiopharmaceuticals.
- The use of unit doses from a central pharmacy for some or all doses.

These options are listed if, for totally separate reasons, Radiology is considering these mechanisms. There would then be no need to expend extra effort to address the concerns raised at our meeting. Otherwise, I suggest we implement the following additional record keeping on MDP scans as soon as possible.

- All MDP scans will be logged with the date, technicians initials, patients name and scan time for the anterior chest (or equivalent view).
- Scans performed on the Prism 2000 will use a scan time of at least 20 minutes.
- The Picker 415 will be upgraded so that the acquired counts and acquisition time will be recorded on the patient's images.
- Except for the Picker 415 (once upgraded) and the orbiter, an electronic copy of all AP views will be kept for no less then 30 days.

Finally, we should implement the Mallinkrodt (or equivalent) computerized hot lab management program for all dose injection and preparation. I passed this briefly by Dr. Baum and he had nothing negative to say on it.

93-0212 GM/cl

Minutes of the Nuclear Medicine review of the dose administration investigation, 4/23/93

The meeting was held in the MRI Conference Room on 1 Founders. It was attended by the Nuclear Medicine medical staff, technologist staff, student technologists, and Mark Selikson, Lily Lodhi, and George MacDurmon from Radiation Safety.

Dr. Selikson made the following points:

That a series of events pointed to the possibility of a falsification of records issue.

That an investigation was initiated by the Radiation Safety Office in conjunction with Radiology administration that looked at a number of issues, but ended up focusing on MDP administrations.

That the purpose of the meeting was to close out the investigation and report its findings to the Nuclear Medicine staff.

That there were no specific findings of falsification of records that would require a formal notification to the NRC.

That we had communicated with the NRC regarding the nature and findings of the investigation.

That falsification of records is absolutely unacceptable, and that NRC regulations can hold an individual liable in addition to the institution.

That observation or knowledge of willful NRC violations must be reported.

That an individual who reports a violation of NRC regulations cannot be discriminated against. And that such reports would be kept confidential if so requested.

That the Radiation Safety Office would be focusing on record integrity in future audits.

That a series of changes in documentation was in the process of being implemented.

That Radiology Administration has been consistently and totally committed to running a program complete compliance with all regulatory requirements.

That he looked forward to the Nuclear Medicine staff complete attention to detail and regulatory compliance in the future, and that the resources of the Radiation Safety Office were available to assist with any issue.

That any ideas for improving radiation safety issues within Nuclear Medicine were welcome.

ok MS-

University of Pennsylvania Medical Center
Hospital of the University of Pennsylvania
Intramural Correspondence

1 Silverstein **Department of Radiology** **662-7289**

TO: Mark Selikson, Ph.D.
Director, Radiation Safety

FROM: Larry A. Ranahan
Executive Director for Administration

RE: Draft Memorandum - Public Relations

DATE: April 14, 1993

As per our conversation of April 13th, Dr. Baum and I have reviewed the draft memorandum to Rebecca Harmon regarding recent allegations made concerning dose administration records. In addition to the comments which I provided to you concerning clarification of the time frame to which the allegations made reference, Dr. Baum would like to be certain that in the second paragraph, a statement is provided, indicating that the "information documented in the existing dose administration records indicates that no infraction occurred. Further, these records meet or exceed current Federal Regulatory requirements". While both Dr. Baum and myself understand that the current documentation leaves some margin of doubt, however, we believe that it would be appropriate to be more definitively in our statement, rather than leaving uncertainties regarding the sufficiency of the evidence and its ability to either prove or disprove conclusively the allegations made.

Please feel free to contact me if you have concerns over these changes prior to the finalization of the memorandum.

LAR/ch

A/S
Item #5

UNIVERSITY of PENNSYLVANIA

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FILE COPY

MEMORANDUM

TO: Rebecca Harmon

FROM: Mark Selikson

DATE: April 23, 1993

RE Incident in Nuclear Medicine, 2/11/93

This is a follow-up to the telephone notification you received from my office. Starting on 2/11/93 allegations were made that dose administration records in clinical Nuclear Medicine, required by federal regulation, were not accurately reflecting the dosages actually administered to patients. The Radiation Safety Office, in conjunction with Radiology administration, conducted an investigation in order to determine the validity and impact of these allegations.

Due to the short half-life of the radioisotope in question (^{99m}Tc), any additional radiation exposure would have been low. A review of information documented in the existing dose administration records produced no findings of infractions. These records meet or exceed current Federal Regulatory requirements. Further investigation would have been possible if the individual around whom the allegation centered was still working at HUP.

In response to this investigation, administration has taken the following actions:

- The Nuclear Regulatory Commission (Region 1) was notified as to the nature of the allegations, the results of the investigations, and the actions we have taken.
- The Department of Radiology has implemented an augmented record keeping/inspection system that ensures enhanced control over this process.

Please call me if you need additional information.

cc: Stanley Baum
Barry Cooperman
Tom Grace
Larry Ranahan
David Mozley

93-0261 GM/cl

A16

UNIVERSITY of PENNSYLVANIA

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FILE COPY

MEMORANDUM

TO: Abass Alavi, M.D.

FROM: Mark Selikson, Ph.D. MS

DATE: April 30, 1993

SUBJECT: Log book for MDP procedures.

The following procedure should be instituted in Nuclear Medicine:

1. A log book maintained with the Picker 415, GE 2000, and Orbiter units containing entries for the patient's name, date of study, the scan time and total counts to acquire **anterior chest** image, and initial of the technologist.

2. Cameras able to stamp the time and counts automatically on the film should be used for the Picker and Orbiter units. No electronic image storage is needed for these cameras.

3. For the GE 2000 unit, either the time and counts for anterior chest should be stamped on the film, or an electronic image of anterior chest will be stored on a floppy disk or hard drive for a period of one month.

4. For the Prism 2000 unit, the time for whole body scan acquisition will be set to 20 minutes.

This is the minimum amount of recorded information with which I am comfortable. Please call me if you have any questions regarding this matter.

cc: Larry Ranahan
John Reilly

93-0291 LL/cl L.L.

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FILE COPY

Radiation Safety Office
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MEMORANDUM

To: Abass Alavi

From: Mark Selikson

Date: May 25, 1993

Re: MDP administrations

Starting on 2/11/93 allegations were made that dose administration records in clinical Nuclear Medicine, required by federal regulation, were not accurately reflecting the dosages actually administered to patients. The Radiation Safety Office, in conjunction with Radiology administration, conducted an investigation in order to determine the validity and impact of these allegations. A review of information documented in the existing dose administration records produced no findings of infractions. These records meet or exceed current Federal Regulatory requirements. Further investigation would have been possible if the individual around whom the allegation centered was still working at HUP.

However, in the event that a dose doubling of ^{99m}Tc MDP did occur, any additional radiation dose to the patient would not have been large:

Organ	25 mCi dose	50 mCi dose
Total Body	0.16 rads	0.32 rads
Bone	0.9 rads	1.8 rads
Red Marrow	0.7 rads	1.4 rads
Kidneys	1.0 rads	2.0 rads
Bladder wall (2 hr void)	3.3 rads	6.5 rads
Bladder wall (4.8 hr void)	7.8 rads	15.5 rads

Therefore, no patient or regulatory agency notification would be required by the Nuclear Regulatory Commission as per the regulations pertaining to misadministrations.

cc: David Mozely
Chun Ki Kim

93-0351 GM/cl

University of Pennsylvania
Minutes for June 3, 1993 Meeting
of the Radiation Safety Committee

CHAIRMAN: Dr. R. Roosa

Members present:
- R. Roosa
- A. Alavi
- S. Heyman
- D. Chakraborty
- T. Grace for G. Moenck
- M. Lafferty
- J. Jaggi
- J. Bennett
- A. Merritt
- J. McCue
- J. Shallcross
- M. Selikson
- J. Lindstrom
- S. Hiss

Members Absent:
- P. Bloch
- C. Koch
- C. Lo
- H. Hamburg
- E. Tracey
- M. McGourty
- T. Reisine
- B. Cooperman
- M. Soulen
- B. Shapiro
- S. Segal

Time: 9:30 AM

Place: Radiation Safety Conference Rm 1412 Hall

1. **Review of Minutes**
The minutes to the March 4, 1993 meeting were reviewed. Dr. Selikson reported that the in-services required by Item 1 of the minutes had been completed. Also that the report on the Nuclear Medicine record falsification allegations is contained in the incidents report prepared for this meeting. Further that Dr. Kung's sources that were reported missing at the last meeting were found. The minutes and the follow-up actions were unanimously approved.

2. **Amendments and Authorizations**
The Amendments and Authorizations acted on from 2/19/93 through 5/15/93 including the Human Use Authorizations and the approvals to use the research Irradiators were reviewed and unanimously approved as presented.

3 **ALARA**
The ALARA reports for the 4th quarter 1992 and first quarter 1993 were reviewed. Dr. Selikson reported on the exposures to the Nuclear Medicine staff and Dr. Kung's personnel. [redacted] April exposure was 30 mrem and [redacted] was 40 mrem. Dr. Chakraborty discussed the HUP ALARA reports. He recommended the January exposure for [redacted] be changes to an administrative dose equal to the average of her last three months exposure. Concerning the level II ALARA reports he noted the past problems have been with higher than typical output from certain angiography equipment. He reported that the output from this equipment has been reduced from 2.4 to less than 1 Roentgen per minute without compromising image quality so future results should show even lower exposures. He also reported that additional shielding

B/1 Memo #1

had been added and had helped reduce the dose. In addition, J. Edelstein has been conducting in services for the physicians which also contribute to dose reduction.
After some further discussion the ALARA reports and recommended actions were unanimously approved.

4. **Surveys**

The research lab survey results summaries for the first quarter of 1993 were reviewed. Dr. Selikson reported that although the graph showed increases in deficiencies for survey records the RSO survey measurements only found contamination three times, item 12. Also the review for in-lab ALARA training records is conducted in the first quarter and missing training records are recorded in this category. Dr. Alavi asked if other institutions had similar infraction recording systems to which we could compare our results. Dr. Selikson will investigate. Dr. Selikson reported that we are working on a new computer system to correct the problems we have noted with package receipt records.

The responses to notification of deficiencies of 35 points or higher were reviewed. Dr. Selikson noted that all investigators had responded and had satisfactory follow-up surveys. He also reported that Dr. Kopf had successfully completed his probation period and would be returned to the regular quarterly survey schedule.

Dr. Selikson reported on the summary of Nuclear Medicine survey results. The graphs show the trends in both type and frequency of infractions. Dr. Selikson also reported on an event in HUP Nuclear medicine where a patient received a fractionated Na I therapy dose and the records might possibly be interpreted as not being executed in complete accordance with the regulations. Dr. Selikson indicated he did not feel it was a misadministration but that an informative report of the event may be forwarded to the NRC. The Committee was concerned about the infractions at Children's Hospital when taken in conjunction with the contamination incident. Dr. Selikson reported that he had written the Radiology administrator and recommended a formal daily documented review of required records by the Chief Technician . This has been implemented and will be audited by the RSO.

Dr. Selikson reported that the routine audits of the other clinical areas using radioactive materials.

Dr. Selikson reported on the surveys of x-ray units and the cyclotron performed by the RSO. Dr. Lafferty asked about the status of the cyclotron air sampling. Dr. Selikson reported that we were waiting information concerning funding for the RSO proposed system. No problems were identified.

The survey results and corrective actions were unanimously accepted as presented.

5. **Incidents**

Dr. Selikson reported on the incidents, none of which required reporting to regulatory agencies. He reviewed the history of the 2/11/93 Nuclear Medicine incident concerning allegations about official records. This incident was discussed at the last committee meeting and Dr. Selikson was asked to report on it at the next committee meeting. He reconfirmed that no records were found to substantiate the allegations. He reported that additional records, not required by the NRC, are now being kept by the Department that will identify problems as alleged and that the RSO is checking the records regularly. He also reported that a recent audit of these new records had identified one possible problem. The matter was referred to the Nuclear Medicine Staff and the follow-up

investigation identified a properly recorded infiltrated dose which should normally show a false trigger on the new records system. Dr. Selikson noted that his investigation did not find any documentation to substantiate the allegations and that the University Counsel and the NRC had been informed of the matter. Dr. Alavi raised the question of who should be notified in the event of facilities contamination. He notifies only the RSO and noted that they initiate further notifications in needed. Dr. Selikson commented that he had discussed this with L. Ranahan who asked that he be notified only as a matter of courtesy. Tom Grace commented that the Hospital Safety Committee should to be notified if hallways are to be shut down or if there are matters that relate to patient safety. Dr. Selikson indicated that his office would notify L. Ranahan and Tom Grace for incidents that relate to their areas of concern.

Dr. Selikson reported on the incident in CHOP Nuclear medicine where the Chief Technician left and the RSO staff remained after normal hours to finish the decontamination. He noted that the CHOP administration had been notified and will follow-up .

Dr. Selikson also reported on the other incidents and noted that minor incidents such as those involving posting violations of therapy patient areas would in the future be reported as survey infractions.

The incident reports and corrective actions were unanimously accepted as presented.

6. **RDRC**

The actions of the RDRC as documented in the minutes of the March 19, April 16, and May 14, 1993 meetings were reviewed and unanimously accepted as presented. Copies of the approved protocols were available for review at the meeting.

7. **Executive Group**

The actions of the Executive Group as documented in the minutes of the May 25, 1993 meeting were reviewed and unanimously accepted as presented.

8. **Regulatory Agency Actions**

Dr. Selikson reported that the RSO had received the revisions to the renewal of our NRC broad scope license and that we are still negotiating with the NRC on several matters including disposal. Also that we will be submitting modification requests to obtain several variances from regulations such as quorum requirements and prescriptive survey requirements. He also reported that an additional inventory requirement was added the SNM 114 license.

Dr. Selikson reported that the RSO was investigating possible ways to reduce the cost of NRC licensing but was preparing to pay the over $20,000.00 in increased licensing costs. He also reported that we plan to be able to present a decommissioning funding plan that will be within the current $750.000.00 indemnification funding.

The results of the State Inspection of Children's Hospital x-ray and Nuclear Medicine facilities were discussed and it was noted that no items of noncompliance were found.

Dr. Selikson reported that the State also inspected the Radiation Oncology Department and although the inspector indicated the program looked good he had identified areas of

noncompliance. Dr. Selikson indicated the items of noncompliance would be dealt with when the official report was received.

9. **Waste**

Dr. Selikson reported that we are now using the new waste facilities in the Hajoka building. He noted we are now storing for decay specific radionuclides with half lives up to120 days and that costs of disposal for most licensees should be less than the costs of shipping wastes for commercial disposal.

10. Annual Report

Dr. Selikson reviewed all sections of the report. Committee members were asked to forward, within two weeks, any corrections/comments to the RSO for inclusion into the report. A final official report will then be prepared for the record incorporating any changes requested by committee members.

The meeting was adjourned at 10:35 AM

The next meeting in scheduled for Thursday, September 16, 1993 at 9:30 AM in the RSO conference room.

Prepared by:

_____
Joe Mc Cue

Approved By:

_____
M. Selikson, Ph. D. ,
Radiation Safety Officer

_____
R. Roosa, Ph. D.
Chairman, Radiation Safety Committee