



Analysis: Medical radiation 'alarming'

By ED SUSMAN

LONDON, Aug. 4 (UPI) -- A person who undergoes medical tests that include use of radioactive material may have enough residual radiation in his or her body to trigger security devices as long as three months after the test, researchers said Friday.

"Such procedures make patients temporarily radioactive and can be an important cause of false alarms at airports by activating radiation detectors," said Kalyan Gangopadhyay, specialist registrar in diabetes and endocrinology at City Hospital in Birmingham, United Kingdom, reporting in Friday's editions of the British Journal of Medicine.

"Doctors show a worrying lack of awareness about such potential problems. As a result, patients receiving radioactive isotopes for diagnostic and therapeutic purposes are not adequately warned about persisting radioactivity and precautions that need to be taken."

One of Gangopadhyay's patients, a 46-year-old man was treated for a thyroid condition with Iodine-131. "Our nuclear medicine department gave him the radionuclide instruction card highlighting the usual precautions to be taken. However, the card did not mention the risk of radiation detectors being triggered," Gangopadhyay said.

Six weeks later the patient went to Disney World in Orlando on vacation and got more attention than he planned. At the Orlando airport, he set off the security alarm at check-in. He was immediately detained and strip-searched. Sniffer dogs were assigned to the case and prolonged interrogation ensued.

"Luckily, he was carrying his radionuclide card with him. He was finally released after a long delay and much embarrassment," Gangopadhyay reported. "We apologized to him for the lack of information given to him after the radioiodine treatment, and since this event, changes have been made to the radionuclide card issued to patients. "

"This is not an uncommon problem," said Robert Ackerhalt, professor of nuclear medicine at the University at Buffalo in New York. "We had a case where a man under went a test requiring I-131 and for the next two weeks, his car was stopped as he crossed the border between the United States and Canada. We routinely give patients cards explaining they have had these procedures."

Ackerhalt told United Press International that Customs agents, while acknowledging the certificates issued by medical staff, still conduct their own examinations.

"Those radiation detectors at the border are so sensitive," he said, "that they picked up radiation being emitted by the patient who was riding in a car." Three weeks after the study, the patient reported going through the check point without incident.

Ackerhalt said Customs agents routinely ask the individuals to be screened separately and then also screen the car. Once satisfied that the radiation is being emitted only by the one individual, the travelers are allowed to proceed.

Gangopadhyay said other examples in the literature include people who were detected days to weeks after treatments as they attempted to visit the White House, airports and other sensitive facilities.

Following the Orlando incident, the nuclear medicine department in Birmingham has now amended the radionuclide card given to patients receiving radioiodine treatment to read: "Airport alarms may be triggered for up to 12 weeks after receiving your therapy dose."

"Airports worldwide are deploying more sensitive radiation detection systems and hence one would expect more such cases unless we take responsibility of forewarning our patients. Hence, we felt it was important to dissipate this information in the hope that this will prevent further unnecessary harassment and embarrassment to patients," Gangopadhyay said.

He said that studies indicate patients continue to emit radiation as long as 95 days after treatment.

"Some of these radioactive medications have a very long half-life," Ackerhalt, a nuclear medicine pharmacist and nuclear chemist, told UPI. "These detectors are spectacular in the levels of radiation they can pick up. In a sense, that is reassuring for the public, but sometimes it can be a bit embarrassing for out patients."

Ackerhalt said, however, that Customs and other border officials are aware of the situation and will often begin a conversation with the occupants of a car by saying, "So, I guess someone has recently undergone a medical procedure..."

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