

system primarily used for trauma patients. The radiologic findings were compared with a written record of the drug containers recovered from the feces of suspects.

"As we expected, CT imaging allowed us to see all the drug containers, especially when we knew what to look for," Dr. Flach said.

The results showed that the coating and manufacture of the containers changed their appearance, especially on CT images. Rubber coated condoms filled with cocaine appeared very hyper-dense, or white, on CT, while other containers of similar size with plastic foil wrapping appeared iso- to hypo-dense, or gray to black. This contradicts some previous reports that have suggested image density may correlate with the drug content.

The sensitivity of CT was 100 percent, meaning CT was able to find all cocaine containers that were present in the drug mules' bodies. LSDR had a sensitivity rate of 85 percent, and digital x-ray was able to identify the presence of cocaine containers only 70 percent of the time.

"There were positive findings on CT that were clearly not detectable on x-rays due to overlap of intestinal air, feces or other dense structures," Dr. Flach said.

While CT was clearly the most accurate imaging modality in detecting the drug containers, the increased ionizing radiation associated with the exam is a concern when imaging people who are presumably healthy.

"CT is the way to go," Dr. Flach said. "But low-dose protocols need to be implemented to ensure the safety of the people undergoing the procedure."

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