FIRST WATCH
Helping the Helpers

iPhone 12/Implanted Cardiac Devices Warning and Monkeypox in the UK

Recently, in the medical news, were **multiple reports of a couple of small studies showing the magnets found in Apple iPhone 12s, when in close proximity to a person with certain implanted cardiac devices, impact operation of the device**.

Most of the research & discussion is centered around the Apple Mag Safe technology which is included in iPhone 12s. According to some sites, future iPhones & iPads and perhaps some Apple Watches, may also be affected if they utilize the same technology. Reportedly, the issue seems to be devices that have wireless charging capability that require stronger magnet(s). The cardiac devices identified in the small case series (n=3) and the devices-only study (also small numbers). include implanted defibrillators & pacemakers, primarily Medtronic and Abbott; Boston Science's devices showed either no effect or only temporary asynchronous pacing. The devices tested can be found listed in the chart of the JAHA Open Access article **https://www.ahajournals.org/doi/10.1161/JAHA.121.020818** . The Author comments that the case series and small study should raise concern, but larger studies need to be done to confirm those results and find all the risks. Expect this technology to continue to expand into more products, even products, not tested, currently on the market.

Bottom line, at least at this time, is that these devices should be kept at least 6 inches (10 cm) away from the chest or location of the device. This applies to:

1. First Responders' own devices when they are providing care for a person.
2. Patients that First Responders may come upon that are having problems because of close contact with one of the devices, either because it's in their own pocket or other close place, or they came in close contact with someone else's device.

Medscape – Evidence Builds for iPhone 12 Interference with Cardiac Devices:
https://www.medscape.com/viewarticle/952780

Heart.org News Release - iPhone Series 12 Can Interfere with Some Implanted Devices:
https://newsroom.heart.org/news/magnets-in-iphoneR-series-12-can-interfere-with-some-implanted-cardiac-devices

Cardiology Podcast (item @ 1615) – Short Discussion on iPhone Technology & Reports of a Few Other Products (Fitbit & Apple Watch) Interfering with Implanted Cardiac Devices (testing in 3 controlled patients and in lab device testing without patients):
https://podcasts.apple.com/br/podcast/this-week-in-cardiology/id991125169

MD Edge - Cardiology – More Evidence for iPhone 12 Interference with Some Implanted Cardiac Devices:
https://www.mdedge.com/cardiology/article/241456/arrhythmias-ep/evidence-builds-iphone-12-interference-cardiac-devices?print=1

Monkeypox, a cousin of Smallpox and Cowpox was identified in a traveler in the United Kingdom from Delta State, Nigeria. He arrived in the UK on May 8, 2021. Luckily, he and his family were in quarantine due to COVID-19 protocol and, on May 10, he developed a rash that began on the face. He remained by himself and then, at the end of quarantine, reported for medical help. On May 23, he was admitted to a hospital where lesion samples were sent to the Public Health England Rare & Imported Pathogens Lab the following day. They confirmed that the patient had the West African Clade of Monkeypox via PCR the next day. On May 29, a family member in quarantine with the index patient, reported the same type of rash. The second (2nd) patient was immediately isolated at a hospital and the results returned the same diagnosis on May 31.

Monkeypox is transmitted from person to person via droplets & direct contact. Incubation is typically from 6 to 13 days. Monkeypox, unlike Smallpox, is usually self-limiting, lasting from 2 to 3 weeks,

UK Public Health initiated a response from an Incident Management Team and the team instituted appropriate health care measures, including isolating the two recovering patients, and doing contact tracing on all close contacts of the two, both in the hospital and the community. They also notified the Nigerian authorities. The contact tracing continued for 21 days past the last exposure to the second patient. No other cases were found. No one from the UK had traveled outside of the country. Monkeypox is known to be endemic, with sporadic cases occurring in parts of West & Central Africa, and occasional outbreaks from travel outside of these parts of Africa.

Or, in the case of the outbreak in the US (Illinois, Indiana & Wisconsin) in 2003, caused by transmission between Giant Gambian Rats and multiple Prairie Dogs (traveling in separate cages). The prairie dogs developed respiratory illnesses requiring vet care and breathing treatments. One rabbit also became ill after contact with a prairie dog. In all, there were 53 humans infected, ages 4-53. All the human patients had contact with animals, many from the vet practices, including vets & vet technicians; others from contact with their newly adopted pets. See the link, below, for more specific details.

Imperial College London – Monkey Pox Cases Another Reminder of Our Vulnerability to Viruses: https://www.imperial.ac.uk/news/223754/monkeypox-cases-threat-reminder-vulnerability-viruses/

WHO – Monkey Pox Outbreak in the UK & Northern Ireland (6/21):
https://www.who.int/emergencies/disease-outbreak-news/item/monkeypox---united-kingdom-of-great-britain-and-northern-ireland-ex-nigeria

2003 Historical Perspective of a Multi-State Outbreak of Monkey Pox in the US Associated with Prairie Dogs and Gambian Rat:
https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5223a1.htm