Convulsion an unreliable measure to distinguish syncope from epilepsy

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Convulsive symptoms are an unreliable measure to distinguish epilepsy from syncope and may lead to misdiagnosis, according to an expert speaking at the 6th Asia Pacific Heart Rhythm Society Scientific Session & CardioRhythm 2013 conference held recently in Hong Kong.

"It is not easy to distinguish syncope from epileptic seizure in patients with transient loss of consciousness, especially in those with convulsion attacks, because convulsions are commonly observed in both groups," said Dr. Haruhiko Abe of the University of Occupational and Environmental Health (UOEH), Fukuoka, Japan.

"Doctors in the emergency department and GPs tend to refer collapsed patients with convulsive symptoms to neurologists, while those with ECG abnormalities without convulsive symptoms are usually referred to cardiologists," he continued. "As demonstrated in several studies, misdiagnosis is not uncommon in both conditions."

In fact, up to 39 percent of epilepsy patients treated with antiepileptic drugs were subsequently found to be misdiagnosed, while 8 percent of patients initially diagnosed with syncope were found to have epilepsy in long-term follow-up. [*Q J Med* 1999;92:15-23; *Seizure* 1998;5:403-406; *J Am Coll Cardiol* 2000;36:181-184; *Heart* 2004;90:52-58]

"Syncope with convulsion and epilepsy without convulsion are atypical, and differential diagnosis in these patients could be difficult," he noted.

Abe and colleagues conducted a study on implantable loop recorder (ILR)-guided diagnosis in 47 patients. Among 28 patients initially diagnosed with syncope, five (18 percent) were confirmed by ILR to have epilepsy instead. "More importantly, convulsive symptoms during the attack were observed in 29 percent of patients with cardiac syncope vs 20 percent of patients with epilepsy," pointed out Abe.

"Convulsive symptoms can be present in both epilepsy and syncope. The data show that convulsion should not be used to distinguish between the two conditions," he concluded. MT

Patient selection key in pacing for syncope

The lack of superiority of pacemaker therapy vs placebo in trials on neurally mediated syncope (NMS) reflects the importance of patient selection rather than a lack of therapeutic efficacy.

"Cardiac pacing failed to demonstrate an improvement over placebo in unselected NMS patients," said Professor Richard Sutton of the Imperial College, London, UK. [*JAMA* 2003;289:2224-2229; *Eur Heart J* 2004;25:1741-1748] "Improved patient selection may be the way to focus pacing therapy on those who will benefit."

As demonstrated in the ISSUE-3 study (Third International Study on Syncope of Uncertain Etiology), patients aged ≥40 years with severe asystolic NMS had a 32 percent absolute reduction and 57 percent relative reduction in syncope recurrence after dual chamber pacing therapy. [*Circulation* 2012;125:2566-2571; Brignole M, et al, *Circ Arrh* 2013; in press]

"Notably, almost no recurrence was found in patients with a negative tilt test. Conversely, there was no evidence of efficacy in patients with a positive tilt test," noted Sutton. "The tilt test may be used as a risk stratification tool to identify patients most likely to benefit from pacing."

Medicolegal Series

Maintaining professional boundaries

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Dr. C was flattered when one of his patients contacted him on a social networking site. They exchanged some friendly messages which soon became flirtatious. When the patient's requests for sick leave certificates became more frequent, Dr. C became concerned, realizing he had placed himself in a vulnerable position and had not acted in his patient's best interests.

Respecting the professional boundary between you and your patients is key to maintaining the trust that is an essential part of the doctor-patient relationship. It can sometimes be challenging to set and maintain these boundaries, but to do so is central to fulfilling your duties as a doctor and to having a successful therapeutic relationship, as well as keeping you and your patients safe.

Keeping relationships professional

The power balance in the doctor-patient relationship is inherently unequal. The Medical Council of Hong Kong is clear that any form of sexual advance to a person with whom the doctor has a therapeutic relationship is professional misconduct. It takes a serious view of a doctor who uses his professional position to pursue a personal relationship of a sexual nature with his patient or the patient's spouse. In some cases, patients can become emotionally dependent on their doctor and there must be an awareness of this possibility. Any doctor who takes advantage of this dependency is potentially abusing their responsibility and trust, and leaving themselves open to allegations of misconduct.

The Internet

The Internet has thrown up many new challenges to doctors who may have both a personal and professional profile online. Keeping these two lives distinct and separate may seem difficult, but any approaches by patients should be dealt with entirely professionally, and entering into any communication that could be considered personal is inadvisable. It may seem obvious that social invitations from a patient such as for drinks or dinner should be declined, but this also applies to 'friend requests' online which should also be refused.

Chaperones

The Medical Council of Hong Kong recommends that any intimate examination of a patient should be conducted in the presence of a chaperone, with the full knowledge of the patient. An explanation of the need for an intimate examination should be given and the consent of the patient sought. If the patient declines the use of a chaperone, you should record this decision in the medical records.

Accepting gifts

Although small gifts may seem harmless, they can lead to more substantial gift giving, so it is best to lay the ground rules at an early stage. Advise the patient that you are not supposed to accept personal gifts (perhaps on the first occasion tell them you will share it with the team so as not to cause offence) and politely refuse any larger gifts.

When patients cross boundaries

Doctors take ultimate responsibility for ensuring that their relationship with their patients stays on a professional footing. If patients stray over the line, you should be clear to them by using both verbal and non-verbal messages, for example physical distance, posture and formality. Tell the patient if there is a problem, and nip any boundary crossing in the bud promptly. Document incidents of concern and seek advice from a senior colleague or your defence organization. MT

References:
Hong Kong Medical Council Code of Conduct: http://www.mchk.org.hk/code.htm

Medical Protection Society factsheet on professional boundaries: http://www.medicalprotection.org/hongkong/factsheets/professional-boundaries

Medical Protection Society factsheet on chaperones: http://www.medicalprotection.org/hongkong/factsheets/chaperones