

Massive rhythmic axial myoclonus in post-anoxic coma

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Received January 15, 2008; Accepted May 21, 2008

ABSTRACT – We present the video of a patient who presented massive and impressive rhythmic axial sudden flexion of the neck and the upper part of the trunk in post anoxic coma. [*Published with video sequences*]

Key words: coma, prognosis, post-anoxic, myoclonus, critical care

A 63-year-old man was transferred to the intensive care unit after cardio-respiratory arrest. On arrival, his Glasgow Coma Scale score was 3. One day after admission, he presented massive and impressive rhythmic,

axial, sudden flexion of the neck and the upper part of the trunk, every 10-16 seconds (*see video sequence*). The EEG showed only mechanical artefacts synchronous with the jerks (Thomke *et al.* 2005) (*figure 1*). Intra-



Figure 1. EEG sequence (longitudinal). Mechanical artefacts synchronous with the jerks are seen on a quiescent background whereas the patient breathes normally under mechanical ventilation.



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venous midazolam injection was ineffective. Finally, the patient died from the initial anoxic-ischemic insult. Massive, post-anoxic, rhythmic, axial myoclonus results from widespread ischemic damage to the CNS (Young *et al.* 1990). Gasping, the main differential clinical diagnosis, typically manifests as an abrupt inspiratory phase that occurs preterminally during cardiac arrest (Manole and Hickey 2006). Such jerking movements should not be attributed to bucking the vent, but recognized as myoclonus, which usually implies a poor prognosis (Wijdicks *et al.* 2006). □

Legend for video sequence

Video sequence demonstrates a patient with massive postanoxic rhythmic axial sudden flexion of the neck and the upper part of the trunk, occurring every 10-16 seconds, that should not be attributed to bucking the vent.

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