

About a case: A rare complication of a status epilepticus: the complete AVB

Hsine H¹, Sghaier S², Jdira S¹, Salah S², Hachaichi B³, Ghodbene Z²

1- Regional hospital of Gabes, ER departement

2- District hospital of Oudhref

3- Ghanouche Hospital

Introduction: Status epilepticus is a medical emergency requiring rapid and aggressive management to prevent irreversible brain damage

Objective: To discuss, through an illustrative clinical case and literature data, a rare complication of a status epilepticus with complete AVB.

Clinical vignette: A 75-year-old female patient was admitted to the Emergency Department of Oudhref District Hospital for the treatment of status epilepticus. She had been followed for 15 years for AHT, diabetes and dyslipidemia; also known to be epileptic but she had stopped taking Depakine a few days earlier without consulting her doctor. After admission she received immediately 2 bolus of 10 mg of valium, which stopped the convulsions, the blood glucose level was correct at 1.10 g / l, and a continuous intravenous injection of Gardinal was set at 15 mg / Kg using an electric pump. Subsequently the team of UMAS 05 was informed. Her electrocardiogram showed a complete atrioventricular block with a complete dissociation between atrial rate at 95 b / min and a ventricular rate between 40 and 55 b / min

• After admission in Gabes Regional Hospital, the establishment of a temporary stimulation probe stabilized the patient's condition, and 48 hours after, the heart rate regain spontaneously the sinus rate with a PR space of 154 milliseconds and the dissociated ventricular activity was disappeared. Thereafter a cerebral scan and a biological assessment were also performed and returned normal

Discussion: Seizures are known to cause intense and very marked stimulation of parasympathetic effusions, which can be responsible for heart rhythm and conduction disorders (1). The occurrence of tachycardia is much more frequent than bradycardia with complete Auriculoventricular Block. This syndrome may also explain the high frequency of unexplained and sudden deaths due to cardiac arrest in epileptic patients (2-3). For this patient, the absence of hydro-electrolytic disorders and the normalcy of cardiac evaluation exclude all other causes of secondary complete AVB. The heart rhythm regains a spontaneous and sequential systolic activity which is in favor of bradycardia comitiale syndrome. The gold standard for confirming the diagnosis of this syndrome remains the coupled monitoring of the Electrocardiogram and Electroencephalogram which allows to document the bradycardia phases associated with concomitant parasympathetic discharges (4). In urgency this examination is most often impracticable and the practitioner must know how to evoke this diagnosis and especially differentiate it from a syncope or a secondary comitiale heart rhythm disorders and not the opposite.

Conclusion: At the origin of this disorder is the anarchic activation of the parasympathetic centers. Its recognition and especially its treatment must attract the attention of the practitioner considering the need for urgent and adequate treatment

References :

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FIG 1 : Patient's EKG immediately after convulsion

