Pre-hospital treatment and diagnostic tests for eclampsia and preeclampsia essay ...

Health & Medicine, Stress

- Current pre-hospital treatment regimens for eclampsia and preeclampsia

Both eclampsia and preeclampsia are serious conditions and although they are uncommon, they comprise a challenge especially in the pre-hospital setting (Rodriguez & Velisca, 2007). They relate to high blood pressure and occur during pregnancy, which mean that mother and the growing fetus face a serious threat (nichd. nih. gov). In preeclampsia, due to the mother's increased blood pressure, the fetus gets reduced blood supply, which in turns could mean less oxygen (nichd. nih. gov). Eclampsia is a more serious condition that hazards the mother's life, and consequently the fetus' life too, with distinguishing seizures that could lead to coma (nich. nih. gov). When eclampsia occurs it is very significant that immediate treatment is provided, which includes oxygen administration, airway and hypertension control, use of magnesium and epileptics and finally, delivery of the baby (Rodriguez & Velisca, 2007). If a pregnant woman develops high blood pressure, it is best to be placed in lateral position to prevent aorto-caval compression, and provide basic care until she reaches the hospital (ambulance. vic. gov. au). Basic care includes high flow oxygen and additionally, mother should be tilted with a 30o tilt on the left using a wedge, unless spinal immobilization is required, where pregnant should be tilted with 15o tilt on the left (ambulance. vic. gov. au).

Before a patient is transported to the hospital, all paramedics and medical staff need to be in perfect collaboration with one another and clinically monitor the patient at all stages of transfer (Reanin, 2010). The role of paramedics is to control severe hypertension via pharmacological control and ensure the patient's large blood pressure variations are reduced which is

why labetalol and calcium channel blockers is the suggested treatment (Reanin, 2010). Benzodiazepines could also be used to treat eclampsia in case of sudden blood pressure drop that comes after the antihypertensive treatment has been initiated (Reanin, 2010).

Since both eclampsia and preeclampsia are serious conditions that threaten the pregnant woman's and the fetus' life, is it significant that pre-hospital care is provided immediately upon any sign, during the patient transfer to the hospital, which could include oxygen administration, place the patient in Lateral position and manage to control hypertension.

According to evidence from research published on The Cochrane Library, women are called to make changes in their dietary habits and enhance their wellbeing, as a means to reduce the risk of experiencing the serious effects of preeclampsia (Duley, 2013). Even though the effectiveness of adopting a healthier lifestyle is not yet scientifically proven, it is suggested that any pregnant woman opts in for aerobic exercise, controls her salt intake, and uses supplementation with zinc and protein, as per her own personal preferences (Duley, 2013). Also, observational studies have linked preeclampsia with calcium intake (Duley, 2013). Indicatively, it is estimated that calcium control reduces the risk of preeclampsia by 30 percent, while the effects appear to be greater for women that have low calcium intake (Duley, 2013). So, another way to treat eclampsia and preeclampsia is to take the necessary measures to prevent them from developing, by any given means (Duley, 2013). Finally, high doses of Vitamins E and C are evaluated to relate to prevent preeclampsia, as they behave as antioxidants (Duley, 2013). However, even though the results appear promising, the particular

field requires extensive research prior to proceeding to any clinical practice (Duley, 2013).

- Diagnostic Tests for eclampsia and preeclampsia, (including pre-hospital settings)

Pregnant women with hypertension should have urine testing for protein (apec. org). It is also suggested that urine dipstick is tested in every antenatal visit and eve if trace results under 20 weeks of pregnancy are usually ignored, there should be alert when the pregnant woman is 20+ weeks (apec. org). Additionally, they should have their Serum alanine aminotransferase (ALT) and aspartate aminotransferase (AST) levels checked, to avoid liver disease from hormones secreted during pregnancy and affect hepatic metabolism, which in turns could increase blood pressure (Bacq, 2000). Blood pressure reading can also provide a safe means to diagnose preeclampsia, as long as they are taken at least 6 hours apart (Muza, 2013). If blood pressure reaches or exceeds 140/90 mm Hg then diagnosis should be made in consideration with the urine results (Muza, 2013). However, usual symptoms of preeclampsia include hypertension, edema or swelling usually in the hands and/or feet, changes in vision, nausea or vomiting and headaches, among others, which could give a warning sign to any paramedic health care provider (Muza, 2013), although preeclampsia is difficult to detect due to non-specific symptoms.

Concluding, it is strongly advised that all pregnant women has her blood pressure checked at every antenatal visit to their OBG. Additionally, they should also check their urine occasionally and make sure they closely monitor and follow up any abnormal findings during their pregnancy. In

cases when pregnant women experience severe headaches and/or visual disturbances, they should have their blood pressure checked by all means. Preeclampsia is difficult to diagnose, since most symptoms can imply other medical conditions other than preeclampsia or eclampsia, which is why it is very important that pregnant women inform their OBG of any changes in their body.

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