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⑤ Confirmation

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General Information:

At this time we have asked you to submit your abstract for review by the members of our Scientific Committee of the EBCOG 2010 Congress. Once they have finished their review process, you will receive a [final confirmation](#) that will explain the outcome of the review process. Please always use the reference number (*) in your communications.

We received the following submitted Data:

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Information on the Submission Abstract

Abstract Title:

Ethology of human birth. I. Freeze reaction in human newborns

Abstract Authors:

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Abstract Body:

OBJECTIVES. The objective of this research was to increase our knowledge about the human birth ethology with the aim to improve the scientific foundations of obstetric routines. **MATERIAL AND METHODS.** We video recorded 75 births of healthy normal term infants. This paper presents data from 34 newborns which were immediately placed in skin contact on their mother's abdomen and recorded from the first instants of normal vaginal births. **RESULTS.** The frame by frame analysis of the 34 newborns' first facial expressions, body and limbs movements found two patterns of behaviour. The 22 infants of Group A were normally breathing, crying, and moving. The 12 infants of Group B were immobile and hypotonic from 7 to 65 seconds before having a jump followed by normal cries and movements. Their mean latency time for their first breathing was a little longer than that of Group A: 5.33 versus 3.23 seconds ($p < 0.05$). Before their jump, they had irregular heart rate, fast breathing movements, progressive pink patches on the skin. Neutral facial expression with wide open eyes was the main symptom of their behaviour known in ethology as immobility or freeze reaction. The only factor found to be associated with this reaction was rubbing to dry the infant (OR = 14.67, 95% CI: 1.62-735.12, $p < 0.01$). **CONCLUSION.** Freezing was never described in human newborn. It occurs in response to the neuroception of a life threatening danger. It is a defence strategy under the control of the amygdala and the vagal nerve which protects the individual during the secretion of the stress hormones which are preliminaries to face up to the danger. During this reaction any additional stimulation may increase the risk of vagal shock and cardiac arrest. It is therefore necessary to assess the three vital signs, respiration, heart rate and colour and to avoid any stimulation before progressing to the next steps of the ILCOR neonatal flow algorithm. Mainly, drying must only be done gently without any rubbing.

Abstract Classification:

Presentation preference: **Video/dvd presentation**

Main Track: **General Obstetrics**

Sub Topic : **Symptom(s)**

Sub Topic : **Prevention**

Your Keywords : **newborn immobility care**

Application for ENTOG Award:

Semico Group

Semico online data processing system

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