

How experience influences in External Cephalic Version Success: Longitudinal study

Javier Sánchez Romero¹, Fernando Araico-Rodríguez¹, Javier Herrera-Giménez¹, José Blanco-Carnero¹, Rosa Gallego-Pozuelo², Anibal Nieto-Díaz¹, and Maria IUISA Sanchez-Ferrer³

¹Hospital Clínico Universitario Virgen de la Arrixaca

²Universidad de Murcia Facultad de Medicina

³Murcia University

April 05, 2024

Abstract

Objective: The main objective is to compare ECV results when the procedure is performed by an experienced dedicated team or by seniors obstetricians. **Design:** Prospective longitudinal study. **Setting:** Prospective analysis of ECV performed in ‘Virgen de la Arrixaca’ University Hospital between 10/1st/2018 and 12/31st/ 2019. **Population or Sample:** All the patients who undergo ECV in this hospital. **Methods:** From 10/1st/2018 to 09/31st/2019, ECV were performed by two senior experienced obstetricians who composed the dedicated team for ECV, designed as Group A. From 10/1st/ 2019 to 12/31st/ 2019, ECV was performed by two seniors obstetricians, designed as Group B. Ritodrine was administered during 30 minutes just before the procedure. Propofol was used for sedation. **Main Outcome Measures:** ECV Success rate, complications rate, and Vaginal delivery rate after ECV. **Results:** 122 pregnant women underwent an ECV attempt. 90 (73.8%) were performed by Group A and 32 (26.2%) were carried out by Group B. The ECV success rate increased from 56.3% (B) to 67.8% (A) (P=0.241). The greatest increase in the success rate was seen in nulliparous (from 39.1% to 63.5%, P=0.043). Amniotic fluid pocket (OR=1.32; P=0.035) was associated with ECV success. The complications rate decreased from 18.8% (B) to 6.7% (A) (P=0.049). **Conclusions:** The introduction of an experienced dedicated team reduces ECV complications rate and, in nulliparous it improves the ECV success rate. Multiparity and normal or high amniotic fluid volume increase in the ECV success rate. **Funding:** The authors received no funding for this work. **Keywords:** External Cephalic Version, Super-specialization, Breech

How experience influences in External Cephalic Version Success: Longitudinal study

Javier Sánchez-Romero Ph.D.^{1,2}, Fernando Araico-Rodríguez Ph.D.¹, Javier Herrera-Giménez Ph.D.¹, José Eliseo Blanco-Carnero M.D.^{1,2}, Rosa M Gallego-Pozuelo Ph.D.¹, Anibal Nieto-Díaz Professor M.D.^{1,2}, María Luisa Sánchez-Ferrer M.D.^{1,2}

¹ Department of Obstetrics and Gynecology, ‘Virgen de la Arrixaca’ University Clinical Hospital, Murcia (Spain)

² Department of Surgery, Obstetrics, and Gynecology and Pediatrics of University of Murcia, School of Medicine, Murcia (Spain)

Corresponding author details : Javier Sánchez-Romero

Department of Obstetrics and Gynecology, ‘Virgen de la Arrixaca’ University Clinical Hospital. Ctra. Madrid-Cartagena, s/n 30120, El Palmar (Murcia, Spain) +34 692 573 895 javier.sanchez14@um.es

Shortened running title : How experience influences in ECV success

Tweetable abstract : An experienced dedicated team reduces ECV complications rate and increase ECV success rate in nullipara.

ABSTRACT :

Objective : The main objective is to compare ECV results when the procedure is performed by an experienced dedicated team or by seniors obstetricians.

Design : Prospective longitudinal study.

Setting : Prospective analysis of ECV performed in ‘Virgen de la Arrixaca’ University Hospital between 10/1st/2018 and 12/31st/ 2019.

Population or Sample : All the patients who undergo ECV in this hospital.

Methods : From 10/1st/2018 to 09/31st/2019, ECV were performed by two senior experienced obstetricians who composed the dedicated team for ECV, designed as Group A. From 10/1st/ 2019 to 12/31st/ 2019, ECV was performed by two seniors obstetricians, designed as Group B. Ritodrine was administered during 30 minutes just before the procedure. Propofol was used for sedation.

Main Outcome Measures : ECV Success rate, complications rate, and Vaginal delivery rate after ECV.

Results : 122 pregnant women underwent an ECV attempt. 90 (73.8%) were performed by Group A and 32 (26.2%) were carried out by Group B. The ECV success rate increased from 56.3% (B) to 67.8% (A) (P=0.241). The greatest increase in the success rate was seen in nulliparous (from 39.1% to 63.5%, P=0.043). Amniotic fluid pocket (OR=1.32; P=0.035) was associated with ECV success. The complications rate decreased from 18.8% (B) to 6.7% (A) (P=0.049).

Conclusions : The introduction of an experienced dedicated team reduces ECV complications rate and, in nulliparous it improves the ECV success rate. Multiparity and normal or high amniotic fluid volume increase in the ECV success rate.

Funding : The authors received no funding for this work.

Keywords : External Cephalic Version, Super-specialization, Breech.

Hosted file

Maint text.docx available at <https://authorea.com/users/473372/articles/709386-how-experience-influences-in-external-cephalic-version-success-longitudinal-study>

Hosted file

Table 1.docx available at <https://authorea.com/users/473372/articles/709386-how-experience-influences-in-external-cephalic-version-success-longitudinal-study>

Hosted file

Table 2.docx available at <https://authorea.com/users/473372/articles/709386-how-experience-influences-in-external-cephalic-version-success-longitudinal-study>

Hosted file

Table 3.docx available at <https://authorea.com/users/473372/articles/709386-how-experience-influences-in-external-cephalic-version-success-longitudinal-study>

figures/Figure-1/Figure-1-eps-converted-to.pdf