Video Article

# Erratum: Collecting and Measuring Nociceptive and Inflammatory Mediators in Surgical Wounds

URL: http://www.jove.com/video/4343
DOI: doi:10.3791/4343

Keywords: Errata, Issue 61,

Date Published: 3/7/2012

Citation: Erratum: Collecting and Measuring Nociceptive and Inflammatory Mediators in Surgical Wounds. *J. Vis. Exp.* (61), e4343, doi:10.3791/4343 (2012).



## Abstract

A correction was made to: Collecting and Measuring Nociceptive and Inflammatory Mediators in Surgical Wounds. A key reference was excluded.

A fifth reference:

> 5. Carvalho, B., Clark, D. J. & Angst, M. S. Local and Systemic Release of Cytokines, Nerve Growth Factor, Prostaglandin E2, and Substance P in Incisional Wounds and Serum Following Cesarean Delivery. The Journal of Pain : official journal of the American Pain Society 9 (7), 650-657 (2008).

was added. The abstract was updated to :

> We describe a methodology by which we are able to collect and measure inflammatory and nociceptive biochemical mediators at the surgical wound site. Collecting site-specific biochemical markers allows us to evaluate the relationship between surgical wound and serum levels; determine any associations between mediator release, pain and analgesic consumption; and evaluate the effect of systemic and peripheral drug administration on surgical wound biochemistry.
>
> This methodology has been applied to healthy women undergoing elective cesarean delivery with spinal anesthesia. Wound exudate and serum mediators, in conjunction with pain scores and analgesics consumption were measured at 1, 6, 24, and 48 hours post-cesarean delivery. Biochemical mediators that were detected included IL-1β, IL-2, IL-4, IL-6, IL-7, IL-8, IL-10, IL-12, IL-13, IL-17, TNFα, INFγ, G-CSF, GM-CSF, MCP-1 and MIP-1β, nerve growth factor (NGF), prostaglandin E2 (PG-E2) and substance P. We found no correlations between wound and serum cytokines concentrations or time-release profiles (J Pain. 2008 Jul 9(7):650-7). This article describes and demonstrates the feasibility of collecting and assaying nociceptive and inflammatory mediators in surgical wounds at specific time points. The lack of significant correlations between serum and wound levels shows the importance of determining site-specific release if surgical wounds and localized pathologies are to be studied.

from

> The objectives of this study were to test the feasibility of collecting and measuring inflammatory and nociceptive biochemical mediators at the surgical site; to evaluate the relationship between wound and serum levels; and to determine any associations between mediator release, pain and analgesic consumption post-cesarean delivery. Twenty healthy women undergoing elective cesarean delivery with spinal anesthesia were enrolled. Wound exudate and serum mediators, pain scores and analgesics consumption were measured at 1, 6, 24, and 48 hours post-cesarean. In wound exudate, 19 out of 20 mediators were reliably detected including IL-1β, IL-2, IL-4, IL-6, IL-7, IL-8, IL-10, IL-12, IL-13, IL-17, TNFα, INFγ, G-CSF, GM-CSF, MCP-1 and MIP-1β, nerve growth factor (NGF), prostaglandin E2 (PG-E2) and substance P. Wound PG-E2 and various cytokines peaked early, whereas NGF showed a more delayed release. There were no correlations between the concentration versus time profile of wound and serum cytokines. This study demonstrates the feasibility of collecting and measuring nociceptive and inflammatory mediators in surgical wounds at specific time points. The lack of significant correlations between wound and serum levels emphasizes the importance of determining site-specific release if localized pathologies are to be studied.

## Protocol

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## Disclosures

No conflicts of interest declared.