

Providence St. Joseph Health

## Providence St. Joseph Health Digital Commons

---

All Nursing Boot Camp Posters

St. Vincent Medical Center, Portland, OR

---

2015

### Use of Ice to Reduce Pain With Betamethasone Injections

Ava Cavanagh

*Providence St Vincent Medical Center, [ava.cavanagh@providence.org](mailto:ava.cavanagh@providence.org)*

Tami Chertude

*Providence St Vincent Medical Center, [tamera.chertude@providence.org](mailto:tamera.chertude@providence.org)*

Sofia Costas

*Providence St Vincent Medical Center, [sofia.costas@providence.org](mailto:sofia.costas@providence.org)*

Brooke Dyal

*Providence St Vincent Medical Center, [Brooke.Dyal@providence.org](mailto:Brooke.Dyal@providence.org)*

Cindy Kenyon

*Providence St Vincent Medical Center, [cindy.kenyon@providence.org](mailto:cindy.kenyon@providence.org)*

*See next page for additional authors*

Follow this and additional works at: <https://digitalcommons.psjhealth.org/stvincent-bootcamp>



Part of the [Nursing Commons](#)

---

#### Recommended Citation

Cavanagh, Ava; Chertude, Tami; Costas, Sofia; Dyal, Brooke; Kenyon, Cindy; Irland, Nancy; Rosser, Nancy; and Wilson, Marian, "Use of Ice to Reduce Pain With Betamethasone Injections" (2015). *All Nursing Boot Camp Posters*. 22.

<https://digitalcommons.psjhealth.org/stvincent-bootcamp/22>

This Book is brought to you for free and open access by the St. Vincent Medical Center, Portland, OR at Providence St. Joseph Health Digital Commons. It has been accepted for inclusion in All Nursing Boot Camp Posters by an authorized administrator of Providence St. Joseph Health Digital Commons. For more information, please contact [digitalcommons@providence.org](mailto:digitalcommons@providence.org).

---

**Authors**

Ava Cavanagh, Tami Chertude, Sofia Costas, Brooke Dyal, Cindy Kenyon, Nancy Irland, Nancy Rosser, and Marian Wilson



# Use of Ice to Reduce Pain With Betamethasone Injections



Ava Cavanagh BSN RNC, Tami Chertude BSN RNC, Sofia Costas BSN RNC, Brooke Dyal BSN RNC, Cindy Kenyon BSN RNC,  
Mentors: Nancy Irland DNP RN CNM, Nancy Rosser MSN RN IBCLC, Marian Wilson PhD MPH RN-BC

## Purpose

- To evaluate preterm labor patient preference regarding the use of ice to reduce injection pain associated with Betamethasone injections

## Background

- Application of ice prior to IM injection has been shown to reduce a patient's perception of pain when receiving IM injections.
- This has not been studied with antepartum patients receiving Betamethasone injections to enhance fetal lung maturity.

## Assessment

- Current practice was nurse preference versus patient preference in regards to icing the injection site prior to injection administration.
- Nurses who were using ice varied in their techniques.

## Goals

To determine if the use of ice before Betamethasone IM injections should be standard practice for antepartum patients in order to improve patient experience by reducing the pain of the injection.

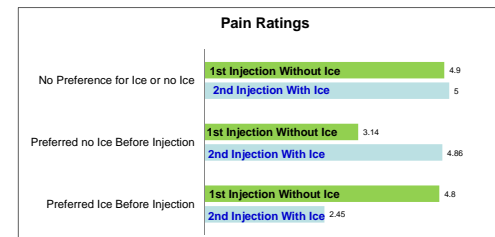
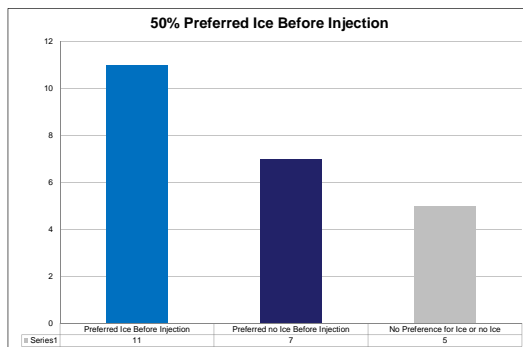
## Intervention

- Patients receiving IM Betamethasone receive two injections.
- First injection was given without ice and the patient rated her pain on a scale from 0 to 10.
- Second injection was given 24 hours later.
- Ice was offered before the second injection.
- After the second injection, the patient was asked to rate her pain and her preference for ice versus no ice.

## Results

Data were collected on 23 patients.

- Those who preferred ice reported a 50% decrease in pain.
- Those who disliked ice reported a 35% increase in pain.
- Those with no preference reported a 0% difference in pain.



## Implications for Practice

- Our data suggests that pain reduction with ice is an individual experience. Participants varied in their perception of the helpfulness of ice to alleviate injection pain.
- Recommendation will be to educate patients about the reported benefits of using ice before IM Betamethasone injections.
- Patients will be given the option of choosing ice vs no ice prior to injections.

## Limitations

- Due to a small sample size, more data is needed to assure these findings are generalizable
- Variations in ice application time and nurses' scripting should be standardized to build confidence in future findings

## References

- Comite, S., Greene, A., Cieszynski, S. A., Zarooyabelli, P., & Marks, K. (2007). Minimizing Discomfort during the injection of Radiesse™ with the use of either local anesthetic or ice. *Dermatology Online Journal*, 13 (3),5.
- Hillman, H., Jairman, D. (1986). Freezing skin. *Nursing times*, 82(19), 40-41
- Russell, K., Nicholson, R., & Naidu, R. (2014). Reducing the pain of intramuscular benzathine penicillin injections in the rheumatic fever population of Counties Manukau District Health Board. *Journal of Paediatrics and Child Health*. 50, 112–117
- Saeliwi, P., Preechawai, P., & Aui-aree, N. (2010). Evaluating the effects of ice application on patient comfort before and after Botulinum Toxin Type A injections. *J Med Assoc Thai*, 93 (10), 1200-4