

The Impact of a Brief Educational Intervention on Provider Practice: Instituting an

Gary Bonfante DO

Lehigh Valley Health Network, Gary.Bonfante@lvhn.org

Alexandra Malenka RN, BSN

Lehigh Valley Health Network, alexandra_k.malenka@lvhn.org

Robert Zoshak MBA, BSHA

Lehigh Valley Health Network, robert.zoshak@lvhn.org

Follow this and additional works at: <http://scholarlyworks.lvhn.org/emergency-medicine>



Part of the [Emergency Medicine Commons](#)

Published In/Presented At

Bonfante, G. Malenka, A. Zoshak, R. (Oct,2016). *The Impact of a Brief Educational Intervention on Provider Practice: Instituting an Evidence-Based Approach to Blunt Chest Trauma at a Level IV Trauma Center*. Poster Presented at: Pennsylvania Trauma Systems Foundation Annual Fall Conference, Harrisburg, PA.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.

The Impact of a Brief Educational Intervention on Provider Practice: Instituting an Evidence-Based Approach to Blunt Chest Trauma at a Level IV Trauma Center

Gary Bonfante, DO, FACOEP, FACEP, Alexandra Malenka, RN, BSN and Robert Zoshak, MBA, BSHA
Lehigh Valley Hospital-Hazleton, Hazleton, PA

OBJECTIVE:

To reduce the number of dedicated plain film rib images obtained for the evaluation of blunt chest trauma.

BACKGROUND

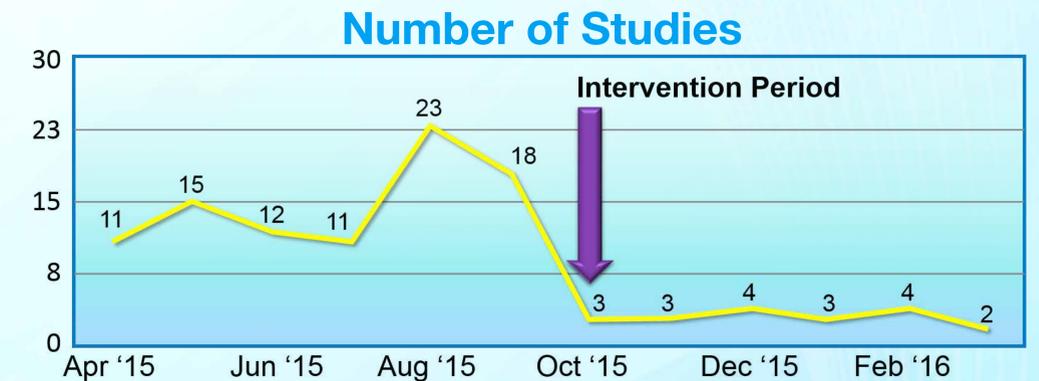
Our facility became accredited as a Level IV Trauma Center in November of 2015. Prior to this time, it was common for providers to order imaging based on personal preference rather than evidence-based protocols. In the process of Performance Improvement (PI) review, a high number of dedicated rib films being ordered for the evaluation of blunt chest trauma was noted. This was most common when the complaint was unilateral. Up to 50% of injuries can be missed with normal chest radiographs and 15% of rib fractures may be missed by just utilizing dedicated rib films.^{1,2}

INTERVENTION

Our brief educational intervention contained several pieces. Information from PI review was shared with providers and trauma program leadership performed literature search for best practices. Eastern Association for the Surgery of Trauma practice guidelines were also reviewed.³ Thereafter, group consensus was reached. This was discussed with nursing via a standard weekly meeting. Routine rib film orders were removed from the triage ordering set. Real-time teaching and learning was performed on shift by the trauma program coordinator. PI was utilized to monitor for negative outcomes as a result of the change in ordering practice.

RESULTS

A total of 90 dedicated rib studies were ordered in the 6 month pre-intervention period of April to September 2015. In the subsequent six months following the intervention, this number was 19. This represents a 78.8% reduction in the use of plain film rib imaging (See Graph 1).



CONCLUSIONS:

An evidence-based brief educational intervention was successful in decreasing the number of plain film rib images obtained for the evaluation of blunt chest trauma.

CONSIDERATIONS: The intervention did not address the appropriateness of imaging. A next step would be to determine if overall imaging can be reduced. Also not measured was the impact of this intervention on costs or patient flow. As most of the patients who did not receive plain films underwent CT imaging, the impact of incidental diagnoses could also be evaluated.

References:

1. Exadaktylos AK, Scwabas G, Schmid SW, Schaller B, Zimmermann H. Do we really need routine computed tomographic scanning in the primary evaluation of blunt chest trauma in patients with "normal" chest radiograph? *J Trauma*. 2001; 51: 1173-1176.
2. Rib Fracture Imaging Author: Lennard A Nadalo, MD, FACR; Chief Editor: Felix S Chew, MD, MBA, Med Medscape Accessed Aug 28, 2016
3. Citation: *J Trauma*. 2011 Feb; 70 (2): 510-8.

© 2016 Lehigh Valley Health Network

570-501-4LVH LVHN.org/hazleton