Alaska ACEP response to the recently published "GUIDELINES FOR THE MANAGEMENT OF ACUTE BLUNT HEAD TRAUMA IN ALASKA"

AK ACEP appreciates the work that has gone into the new guidelines for the management of acute blunt head trauma in Alaska. We share the goal of appropriate head injury care, avoiding inappropriate and costly transfer, and offering a treatment algorithm for rural providers that may not have a large experience base in head trauma. However, there are several aspects of this guideline that are not realistic or necessarily appropriate in our Emergency Departments. As the initial providers to evaluate the vast majority of head injured patients, as well as receive them in transfer we feel our concerns do need to be addressed.

It is not the practice at most ED's to observe patients with a GCS of 15 with negative imaging even with the "high risk factors" or risk of use of anticoagulation or anti-platelet agents. Current emergency department literature supports discharging these patients when appropriate. We can direct you to multiple reviews including a nice summary online http://www.emdocs.net/anti-coagulated-head-injury/. The risk of delayed bleed is not only small but extends beyond the 12 hour observation period suggested. There is literature to support current practice of discharging these patients when observation at home can be continued safely.[1] There are two recent meta-analyses that support discharge rather than Emergency Department observation.[2] [3] Most ED's do not have the capacity to observe these patients, nor do they have an admitting service that would agree to these admissions. While individual social situations, or remote living may necessitate observation, the general practice in these patients is for discharge. The recommendations, and algorithm's need to be adjusted to reflect this.

We would like to see the recommendation regarding consideration of reversal of warfarin if INR>3 even with negative head CT be expanded/revised. As written, these may lead inappropriate reversals that place patients at risk. Reversing a patient with a mechanical valve in this situation would put someone at significant risk. The nuances are important and just a few sentences in this section would add a helpful degree of clarity.

We do not believe there needs to be an age limit to this treatment guideline. The PECARN Pediatric Head Injury imaging guideline is a composed of 2 well validated algorithms for patients 2-18 and less than 2. This algorithm is standard practice in the United States. Even if the 5 year old age limit is applied the use of the PECARN decision tool should be added. It does not make sense to have a guideline for patients 5 and above, but an imaging guideline that only applies to patients 16 and above. Using PECARN in addition to provider judgment has been shown to safely decrease radiation exposure to head injured children, and in our setting could likely more

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[1] Nishijima DK, Offerman SR, Ballard DW, et al. Immediate and delayed traumatic intracranial hemorrhage in patients with head trauma and pre-injury warfarin or clopidogrel use. Ann Emerg Med 2012;59:460-468.

[2]Cohn B, Keim SM, Sanders AB. Can anticoagulated patients be discharged home safely from the emergency department after minor head injury? J Emerg Med. 2014 Mar;46(3):410-7.

[3]Miller J, Lieberman L, Nahab B, Hurst G, Gardner-Gray J, Lewandowski A, Natsui S, Watras J. Delayed intracranial hemorrhage in the anticoagulated patient: A systematic review. J Trauma Acute Care Surg. 2015 Aug;79(2):310-3.

appropriately triage remote patients for transfer for CT. We believe it would most likely decrease these transfers. At a minimum PECARN guidelines should be added to the included imaging guidelines of the document, and we would prefer that there not be an arbitrary age limit to the guideline.

American College of Radiology appropriateness criteria do not support the use of plain XR in head trauma except in the specific case of pediatric non-accidental trauma.[4] We would like this recommendation to be removed. While a positive study may be helpful a negative study is not. If imaging is felt to be necessary then a trauma patient needs a CT.

The terminology “medical observation” is confusing. The admission team for head injuries is variable. At a designated trauma center, any trauma patient is admitted to a surgical service in accordance with ACS guidelines. These patients are "trauma observations". While we recognize at non-trauma centers the admitting team may vary according to local practice and available providers, the term “medical” should be removed. We suggest “head injury”, ‘trauma”, or just plain “observation”.

The specificity of timing of neuro checks in observed patients goes too far to prescribe practice. In many hospitals Q 1 hour neuro checks are only realistic in an ICU or PCU setting. We feel this level of specificity could end up troublesome from a medicolegal perspective. Admitting provider judgement should be respected here.

We would like to see the addition of “involve transplant services” in patients that are non-salvageable.

We apologize for coming to the table late. Most of our members were not aware of these guidelines until the final guideline was released. We have not asked to change anything that would increase transfer or consultation, in fact we think incorporating PECARN would decrease inappropriate pediatric transfers. Please advise us how we can assist in revising these guidelines to be consistent with our current evidenced based practice in this state.

Approved by the Alaska ACEP Board of Directors Nov. 8, 2017.

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[4] https://acsearch.acr.org/docs/3083021/Narrative/