



Georgia Committee for Trauma Excellence

MEETING MINUTES

Thursday, January 16, 2020
Wellstar Atlanta Medical Center
303 Parkway Dr. NE
Atlanta, Georgia 30312

MEMBERS PRESENT	REPRESENTING
Karen Hill, Chair	CHOA Egleston
Jesse Gibson, <i>Vice Chair</i>	Northeast Georgia Medical Center
Liz Atkin, Past Chair	Georgia Trauma Commission
Erin Moorcones, <i>Education</i>	Grady Health System
Kristal Smith, <i>Injury Prevention (conference line)</i>	Navicent Health Medical Center
Anastasia Hartigan, <i>PI (conference line)</i>	Doctors Hospital of Augusta
Tracy Johns, <i>Registry (conference line)</i>	Navicent Health Medical Center
Kellie Rowker, Pediatrics	

OTHERS SIGNING IN	REPRESENTING
Moe Schmind	CHOA
Mary Alice Aubrey <i>(conference line)</i>	CHOA
Jon Johnson <i>(conference line)</i>	CHOA
Karen Johnson <i>(conference line)</i>	CHOA
Dana Davis <i>(conference line)</i>	CHOA
Joni Napier <i>(conference line)</i>	Crisp Regional
Janann Dunnivant <i>(conference line)</i>	Crisp Regional
Tinyhra Harris <i>(conference line)</i>	Doctor's Hospital
Robyn Manda <i>(conference line)</i>	Doctor's Hospital
Kristen Campbell <i>(conference line)</i>	Fairview Park
Melissa Parris <i>(conference line)</i>	Floyd Medical

Katie Hasty <i>(conference line)</i>	Floyd Medical
Kenya Cosby <i>(conference line)</i>	Grady Burn Center
Carey Lamphier <i>(conference line)</i>	Grady Burn Center
Sarah Parker <i>(conference line)</i>	Grady Memorial Hospital
Holly Bagwell Yarbrough <i>(conference line)</i>	Grady Memorial Hospital
Kim Brown <i>(conference line)</i>	Hamilton Medical
Kara McLaughlin <i>(conference line)</i>	J.D. Archbold Memorial Hospital
Anne Marie Dixson <i>(conference line)</i>	J.D Archbold Memorial Hospital
Farrah Parker <i>(conference line)</i>	Joseph M. Still Burn Center
Amanda Ramirez <i>(conference line)</i>	Memorial Health University Medical
Michelle Benton <i>(conference line)</i>	Morgan Memorial
Jo C Fabico-Dulin <i>(conference line)</i>	Navicent Health Medical Center
Inez Jordan <i>(conference line)</i>	Navicent Health Medical Center
Linda Greene <i>(conference line)</i>	Northeast Georgia Medical Center
Jackie Payne <i>(conference line)</i>	Northeast Georgia Medical Center
Denise Hughes <i>(conference line)</i>	Northeast Georgia Medical Center
Gina Solomon <i>(conference line)</i>	Northside Gwinnett Medical Center
Colleen Horne <i>(conference line)</i>	Northside Gwinnett Medical Center
Tawny Waltz <i>(conference line)</i>	Northside Gwinnett Medical Center
Barlynda Bryant <i>(conference line)</i>	Northside Gwinnett Medical Center
Heather Morgan <i>(conference line)</i>	Piedmont Athens
Karen Pittard <i>(conference line)</i>	Piedmont Athens
Shannon Thomas <i>(conference line)</i>	Piedmont Athens
Jane Brock <i>(conference line)</i>	Piedmont Athens
Mary Willis <i>(conference line)</i>	Piedmont Columbus
Sabrina Westbrook <i>(conference line)</i>	Piedmont Walton
Sharon Hogue <i>(conference line)</i>	Polk Medical Center
Jaina Carnes <i>(conference line)</i>	Redmond Regional
Jim Sargent	Wellstar Atlanta Medical Center
Emily Page <i>(conference line)</i>	Wellstar Atlanta Medical Center
Kathy Segó	Wellstar Atlanta Medical Center
Karen Vieira	Wellstar Atlanta Medical Center
Debora Dabadee	Wellstar Atlanta Medical Center
Cassandra Burroughs	Wellstar Atlanta Medical Center
Consuela Adams <i>(conference line)</i>	Wellstar Atlanta Medical Center
Rhonda Jones <i>(conference line)</i>	Wellstar Atlanta Medical Center
Judith Lyttle <i>(conference line)</i>	Wellstar Atlanta Medical Center
Jamie Van Ness <i>(conference line)</i>	Wellstar Kennestone
Bobbi Jazdzewski <i>(conference line)</i>	Wellstar North Fulton
Allison Christou <i>(conference line)</i>	Wellstar North Fulton
Tatiana Woods <i>(conference line)</i>	Wellstar North Fulton
Michelle Evans <i>(conference line)</i>	Winn Army Community Hospital
Ashley Faircloth <i>(conference line)</i>	Dwight D. Eisenhower Army Medical
Kathleen Stone <i>(conference line)</i>	Wellstar Paulding
Renee Morgan	DPH/Office of EMS/Trauma
Marie Probst	DPH/Office of EMS/Trauma
Katie Hamilton	Georgia Trauma Care Commission, Staff
Billy Kunkle	Georgia Trauma Care Commission, Staff
Erin Bolinger	Georgia Trauma Care Commission, Staff
Sharon Nieb	Emory/IPRCE
Kara Allard	GQIP

CALL TO ORDER

Ms. Jesse Gibson called the meeting of the Georgia Committee for Trauma Excellence to order at 2:03 PM. Quorum was established with 8 of 10 members present or via conference line.

MOTION GCTE 2020-01-01:

I make the motion to approve the meeting minutes from the November 20, 2019 meeting.

MOTION: Tracy Johns

SECOND: Kellie Rowker

ACTION: The motion ***PASSED*** with no objections, nor abstentions.

DISCUSSION: There was no discussion that followed.

Ms. Hill welcomed new faces and thanked Atlanta Medical Center for hosting today's meeting.

Injury Prevention

The IP Subcommittee has several events upcoming. Day at the Capitol is February 20th and we are looking for survivor story. We are looking for survivors that highlight the continuum of care. Please contact Lori Mabry if you have a survivor to highlight. . There is also an Injury Prevention showcase . The ability to present during the luncheon for up to 12 IP presentations. The IP Summit registration is on Georgia Trauma Foundation webpage. IP grant submission deadline is first week of February.

Registry Subcommittee

Ms. Johns reported there hasn't been a meeting since the last meeting and our next Registry call is at 10:30 next Thursday January 24th – covering pediatrics. Ms. Mabry reminded Ms. Johns about registry funds to be utilized. Ms. Mabry says it is funds for the ICD-10 course. Further discussion after meeting.

Education Subcommittee

Ms. Moorcones reported that scheduling the education courses has been smooth with teamwork. There are 4 TNCC funded courses ,scheduled with locations identified. Union General, Piedmont/Fayette, Meadows, and Waycross. ENPC with Jon Johnson's addition to our subcommittee (CHOA) he can assist with our pediatric courses that are upcoming.

For TCAR , we have 70 seats and registration is open for this course. There will be 20 other spots , there are 2 courses happening at Grady and one in Augusta April 30-May 1, ATCN course at Grady June 27/28 and there will be outside spots open. TCRN prep course is looking for a date in May, TOPICS is scheduled at the Chateau Elan, we already have 25 applicants and the course is full. WE may have some openings s contact Ms. Moorcones or Ms. Mabry if interested in attending. TCAA course will be during TCAA conference in Savannah May 1st – May 3rd. We want to see if we can get some RTTDC funding for the level 3 and level 4 centers. We ask that you go back to your facilities, identify who can currently teach this and lets collectively, compile a multitude of doctors statewide and collaborate to support this, which then when established, we can request for funding. Ms. Mabry thinks Regions 1 and 2 should do the outreach and if each center can identify for this as we know this is a challenge to assimilate. Ms. Smith offered to help as she has a team that does this. Ms. .Morgan also says there are 2 new level IV' centers that have requested RTTDC.

PI Subcommittee

Ms. Hartigan has been working as a team to send out an annual survey to help drive our PI educational needs. There was a survey sent out prior to this meeting and at the February meeting will discuss those survey results. The group has decided to look into unplanned admission to ICU which has TQIP value . She would like to hist some one on one conversations with level 3 and level 4 centers to find more specific needs. Ms. Hartigan also openly invited all interested to be a part of the PI subcommittee and to please e-mail her if interested.

Pediatric Trauma Subcommittee

Ms. Rower said we are almost at a point where we can request another full year of data on PAN Scans, also working on patient transfer ins and PAN Scan. If you are doing outreach education, please consider adding the video we have about the Pediatric Imaging guidelines. There are barriers and we are trying to figure out how to get the video to the masses. The toolkit and video are on the central site. Ms. Johns was hoping that the smaller hospitals and non-access hospitals get access to this video. Ms. Mabry suggested a shareable link. Discussion of adding QR code to guideline, Ms. Smith would like to distribute at upcoming Pediatric Trauma Symposium.

Trauma Administrators Group

Diversion work group planned from tomorrow at Grady to discuss definitions of diversion, reporting of diversion to EMS and other impacted centers. With recent issues at Grady with the facilities, this meeting has grown to include not only centers effected by the diversion but also, EMS and the community impact. Ms. Wallace was not able to be with us today, but we are looking to have a face to face March meeting at the Symposium and spring meetings in Braselton.

Georgia Trauma Commission

Ms. Atkins gave a report of the turnover in the procurement department and the work being done in getting the AFY19 4th quarter funding to our centers. We do have several whom worked for the Office of Budget and Planning who have assumed roles in finance at the Department of Public Health. WE are working with them to resolve the amended funding issues and get those 4th quarter payments distributed. Ms. Atkins discussed the work put into the strategic plan on aligning our goal with Governor Kemp and his planning. The strategic plan was reviewed and accepted in December. Ms. Atkins reported on the reorganization of the budget . Legislature is in session. We will carve out time in March at GCTE meeting go over our Strategic Plan. We are working collaboratively with OEST to make sure deliverables are understood and being met. We want to work with all centers to make sure they are comfortable with everything required of them and understanding.

Ms. Atkins also thanked everyone who contributed to the December fundraiser for the kids at Christmas. GCTE group was very giving and we look forward to participating again this year. Ms. Atkins discussed the Super Speeder revenue and the collection of those fees and the reinstatement fees which comprise of about \$ 7 million, which is an extra \$50 reinstatement fee. Ms. Hamilton will work on a graph trend of the last several years. Ms. Atkins explained the process now for the FY21 budget. The Governor has reviewed and approved and now pushed out to legislature. We did submit a proposal to receive the reinstatement fees, we backed out the 4% to align with the Governor's cuts and plans. Total ASK was \$6.7 million, and the Governor approved \$ 4.7 million of that. This is all broke down in the Administrative report on how the funds work for us in the AFY20 budget

This was all proposed to be approved at \$6.7 million but we only received the \$ 4.78 million and the Commission will vote on how to reallocate. PFP criteria for FY21 needs to be discussed. It was suggested we discuss this at the March meeting. We are working to get the contracts out earlier. We have asked the Trauma Administrators group to look into this. Ms. Atkins is also looking into some expertise on readiness cost analysis for level 3's, we do not have this data for level 4's and we need to know what we should be contributing to for these centers. There is a lot of concern among rural hospitals due to all this Medicaid work that may not be around

in the next 2 years. We need to get our level 3 and 4's to the table and it is tough as they are so hard to get to the table as they wear so many hats. If you are a level III or IV center and you are interested in being in a work group, please let Ms. Atkins know. The meeting with Governor Kemp today was just a good work kind of meeting and some leadership shifts within his office along with added resources for some of his groups. The joint budget hearings for AFY20 and FY21 begin next Tuesday. Ms. Atkins is looking into funding methodology and our Commission's history and we are going to have work to do that will require a full day of discussion and planning. Discussion of potentially moving to an all readiness model. Also discussed was a bi-annual invoice versus quarterly invoicing. Ms. Atkins is asking for all interested in helping with this to please contact her and let her know, she welcomes all of you.

Centers should be seeing the FY2020 1st quarter funding despite not having paid out the 4th quarter AFY19 funds. WE are hoping to resolve this within the next 2 weeks. Ms. Atkins is working with DPH on our AFY19 funds and their distribution.

Georgia Trauma Foundation.

Ms. Mabry, we have 25 letters of intent for the Injury Prevention grants and we anticipate some really great programs to review. Only those that submitted a letter of intent are allowed to apply for the grant. The foundation is getting ready to open up 2- \$10,000 research grants and this will open up to applications on January 31st. Trauma Awareness Day at the Capitol is February 20, 2020. Briefing and luncheon will be at the Freight Depot. We are doing the Injury Prevention showcase during the luncheon. Please apply prior to the end of the month. Ms. Mabry mentioned the survivor highlight and to contact her if you know of one. There is no pertinent legislation current to Trauma care so this day will just be a thank you with the legislators. The Spring meeting and trauma symposium will be a Chateau Elan in March. Please register as you would for the symposium, all is on the website.

Ms. Mabry went over the Trauma Resource library and its components. The resource library is a shareable resource for us all to have access to. The resource guide was navigated through to show those joining via WebEx. This format is valuable for us all to share between each other. The navigation is simple and easy to use. It was modeled after STN's website and their buckets and how you navigate. There is also a box to put subcommittee meeting minutes. Ms. Mabry says there is a lot of flexibility and this is made for and designed by each of us.

OEMST

Ms. Morgan presented an outline of how and where existing centers are in their designation and re-designation processes. Thomasville, currently a level III, took recommendations from consult visit and worked with them on what was achievable and talked to them about being on a provisional status for the next 12

months. We will go in under this time and do a state designation. WE have several struggling level IV's, and some centers that may downgrade as part of their consult visits. Ms. Morgan and Ms. Atkins plan to visit these centers and find where we can best support them. Level III and Level IV centers are known to wear multiple hats and the trauma side of things gets looked over. We are looking at ways to jointly help them.

We have purchased at the state a web- based program that's free. We have been entering data elements all week and the sister center in our town will be a guinea pig for us. Ms. Hill asked about the we- based image trend and what centers will use that. The initial in the pilot are seeking designation and we have a couple level IV's that want to jump oi it due to high registry costs. In our contract with image trend there are requirements like importing data from DI. All our historical data must be saved in the system and there are several caveats in our software program to be able to do these things. We do need to work these kinks out prior to switching entirely.

Ms. Probst began with the list of Long Id errors that are on the records. There are over 2,000 Long ID errors across different centers. Ms. Probst will be sorting by center and sending e-mail to those affected. Posting on the web portal is the securest way for us to send things. Ms. Johns asked if EMS or GEMISIS are using our LO?NG Id's to link. The trauma arm band will also be data we include in there .The last download for 2019 data is March 31st. We would like the Long ID errors corrected prior to download. Dan in will be checking to make sure errors are corrected. The Long id is still useful. DPH uses that to link to other databases, police data, crash outcomes data, hospital discharge data, and vital records. It was agreed that there is a lot of human error possibility in creating the Long Id. The quarterly report for 2nd Quarter FY2020 was due 1/15. Please send in if you have not sent in already. We are missing 12 of 33 reports. DI and OEMST are meeting monthly diligently working on the update for the year end. Please pay attention to your e-mail. If you do not receive within the next 2 weeks ,please let Ms. Probst know. image trend. You will need to use the year end data to complete your January data. You will see a reduced number of required data elements. You will see some fields no longer required that were once required.

Regarding 2020 Quarterly reports, Items 8 through end, we moved some things from the quarterly report to the annual report, like meeting attendance and there have been some table changes. Please monitor that annual report section throughout the year and complete as the quarters go by. The injury prevention activities that we are asking you to report on in the annual section the table has changed. Instead of listing every IP opportunity provided by your facility we are asking for at least 2 IP programs at a minimum. List name of program, number of times offered throughout the year and a column that asks how you determined that IP opportunity needed to be presented to your community. You need to periodically run and injury prevention report in your report writer just to make

sure you are aligned IP program with the types of injuries your community is experiencing the most. MS. Probst will be sending the new version out. Ms. Probst will send that along with the GCTE contact list out to everyone.

Ms. Hill asked if anyone was having issues with the state criteria. Ms. Johns asked if we could send an updated criteria and element list . Ms. Hill recommended looking into patient drop off by private transfer reports.

New Business

Ms. Hill reviewed the organizational chart with the group. She is working on a succession plan for each subcommittee. We want all subcommittee open to anyone that wants to join. As part of your PFP for your center it is required that you be a part of one of our subcommittees. We do want all subcommittees to have a co-chair. With the exception of the Pediatrics and PI subcommittee we do have co-chairs at this time. If you are interested to filling these co-chair roles, please let Ms. Hill know. It is our intent that co-chairs become chairs every two years. We are seeking increased participation. Moe Schmind agreed to become co-chair of the pediatrics subcommittee.

Every month when Ms. Hill sends the minutes out, she will also send out a request for agenda items. Feel free to send those in to be added to the agenda. For new business, Ms. Hill added Medical Records and transfer as a topic of discussion. We have some issues with not receiving the paperwork. We are not sure if this is not being scanned or not being couriered properly. Ms. Johns suggested updating the patient transfer poster from several years ago and add the importance of the paperwork being sent for medical record ease. Powershare is also an issue being seen a lot. Unreadable discs, corrupted discs, blank discs are all issues.

At pediatric facilities we are having to re-image our pediatric patients that have been transferred in- that have already been imaged at an outside hospital. Power share help is there, please reach out and we can help you enter this information properly. Ms. Johns mentioned having definitive IDs on radiology reads. Everyone shared their process on this. There are some issues to uncover with alias creation for the patients first 24 hours in the system. Some registration does not update a patient record for 24 hours due to clearing blood banks, and surgeries or after they get to their final hospital destination. MS. Johns asked if we got someone to work on level III issues as this would be a great project to look at. Ms. Allard is collaborating with Ms. Carnes and others and working on a survey for level III and IV's to understand some of these issues. It was suggested to have our radiology teams or IT team s talking or get them to the table this may be a group effort, especially for those on the same EMR.

The pediatric imaging guideline video was shown. Next GCTE meeting is Thursday March 18th at 2:00 at Chateau Elan in Braselton.

Ms. Gibson mentioned Region 2 and Jackson County in Region 10 are participating in a pre-hospital blood pilot project. We were given approval and we are working with OEMS/T and the Commission and we are going live with our pilot. Each county will have 2 units of liquid plasma on all supervisor trucks. There is a set criteria use for this plasma and the guidelines are clear. We have modeled after the Texas model, but they use whole blood, but we are using plasma. We had anticipated going live January 20th, but we are pushing it back to February. As soon as we can show this is safe and that training is completed regarding paramedic extension of scope practices. Issue with temperature monitoring is currently being assessed. Plasma has a 26-day shelf life. We are asking all to turn in around day 19 for new product. The statewide medical director group has met and is very supportive to see these outcomes.

Meeting adjourned at 3:55PM

Minutes Crafted by Erin Bolinger

Unnecessary imaging can be harmful to children.

Not all pediatric injuries require imaging. To limit unnecessary imaging, ensure each exam is absolutely necessary based on patient condition, these imaging guidelines, and physician discretion.

If your facility does not have the resources to treat the injury, send the patient to a facility with pediatric trauma services. Call your local/regional pediatric trauma center for additional guidance.

Check Before You Scan

If...

Altered mental status

Loss of consciousness for more than 5 seconds

Physical exam evidence of injuries centered on the head and neck region

For Children UNDER 2

- Scalp hematoma (other than frontal)
- Palpable skull fracture

For Children OVER 2

- Vomiting
- Signs of skull fracture
- Severe headache

consider a Head CT

[TQIP Best Practices in Imaging Guidelines, p. 18-19](#)

If...

unable to clinically clear C-spine*

If plain films are abnormal, transfer patient to a pediatric trauma center.

If patient meets Modified Memphis Criteria* for obtaining a CTA of the neck, or there is concern for blunt cerebral vascular injury based on established guidelines, then reconstruction of the cervical spine is appropriate HOWEVER you still cannot clear spine based on CT alone

Imaging is recommended when 3 or 4 of the following criteria are positive:

- GCS < 14
- GCS (Eye criterion) = 1
- Motor vehicle crash (MVC) mechanism of injury
- Age 24-36 months

consider Plain Films

[TQIP Best Practices in Imaging Guidelines, p. 26-27](#)

If...

Abnormal CXR in blunt trauma (widened mediastinum)

Penetrating trauma with concern for major vascular injury

consider a Chest CT Angiogram

[TQIP Best Practices in Imaging Guidelines, p. 37](#)

If...

Positive FAST

Abdominal wall bruising/ seat belt sign

GCS <14 with concern for abdominal injury

Thoracic wall trauma

Complaints of abdominal pain and/or tenderness to palpation

Decreased breath sounds

Inability to fully assess the abdomen with concern for abdominal trauma

consider an Abdomen/Pelvis CT with contrast

[TQIP Best Practices in Imaging Guidelines, p. 42](#)

* indicates further description available in FAQ section

Pediatric Trauma Imaging Guideline, Age <15

Don't Just Scan!

Unnecessary imaging can be harmful to children.

Not all pediatric injuries require imaging.

Can you Fix It?

Yes

No

If the exam is absolutely necessary based on patient condition and revised imaging guidelines, do the scan.

Don't Scan! Send your patient to (insert name of peds center) for specialized assessment

Frequently Asked Questions

What is the purpose of these guidelines?

Pediatric imaging can save lives and prevent the need for more invasive procedures by providing fast and accurate information to inform diagnosis. However, inappropriate imaging results in unnecessary and preventable radiation exposure and risks. These guidelines are intended to help healthcare providers reduce radiation exposure in pediatric patients and provide appropriate, balanced care for their patients.

How do we know that unnecessary imaging can be harmful to children?

Studies have shown that every scan matters. “Nationally, 4 million pediatric CTs of the head, abdomen/pelvis, chest, or spine performed each year are projected to cause 4,870 future cancers” (Miglioretti et. al. *Pediatric Computed Tomography and Associated Radiation Exposure and Estimated Cancer Risk*).

For more supporting research, see the References section.

What are these guidelines based on?

These guidelines are based on the [American College of Surgeon’s Trauma Quality Improvement Program \(TQIP\) Best Practices in Imaging Guideline](#), [Pediatric Head Injury/ Trauma Algorithm \(PECARN\)](#), [National Emergency X-Radiography Utilization Study \(NEXUS\)](#), and have been reviewed by leading pediatric trauma surgeons and providers in Georgia.

Isn’t it better to scan rather than potentially miss an injury?

These guidelines are just that – guidelines. Ultimately, it is up to the healthcare team and patient/caregiver to decide what is most appropriate for the patient. The benefits of imaging a child must be weighed against the potential risks of radiation exposure. The ultimate goal of these guidelines is to maximize the benefit of appropriate scanning while minimizing potential health risks.

Why should I transfer pediatric patients to a pediatric trauma facility?

Pediatric patients can require specialized equipment that is designed for their size and needs. Facilities that do not have pediatric trauma resources or equipment are encouraged to transfer patients to the nearest pediatric trauma facility for appropriate testing and to avoid duplicate testing.

Why do we do plain films for Cervical Spine instead of CT?

While plain films can be more difficult to obtain, the benefits of choosing plain films include decreased radiation to the thyroid, cornea, and lymphoid tissue (TQIP *Best Practices Guidelines in Imaging*, p 27). If unable to obtain plain films, send your patient to a pediatric trauma facility for further work up, that may include a CT or MRI.

When is Cervical Spine imaging NOT recommended for the pediatric patient?

Patients who do not meet criteria for pediatric C-spine imaging include those with the following:

- GCS > 13
- No neurologic deficit
- No midline tenderness
- No distracting injury
- No unexplained hypotension
- Not intoxicated

Frequently Asked Questions continued on next page

Frequently Asked Questions

Continued from previous page

How do we clear the Cervical Spine?

If you are not able to clinically clear the C-spine based on examination and patient presentation, plain films can be used. When obtaining plain films, both anteroposterior (AP) and lateral views are required. Flexion and extension views, as well as inclusion of the odontoid are not necessary (TQIP *Best Practices Guidelines in Imaging*, p 27). If unable clear the C-spine through clinical evaluation or with the addition of plain films, send your patient to a pediatric trauma facility for further evaluation.

What is the modified Memphis criteria?

The modified Memphis criteria are a set of screening criteria for blunt cerebrovascular injury (BCVI) in trauma. The presence of one or more of these criteria indicates the need for a complementary CTA or DSA study to exclude a BCVI. The screening protocol criteria for BCVI are:

- base of skull fracture with involvement of the carotid canal
- base of skull fracture with involvement of petrous temporal bone
- cervical spine fracture
- neurological exam findings not explained by neuroimaging
- Horner syndrome
- Le Fort II or III fracture pattern
- neck soft tissue injury (e.g. seatbelt sign, hanging, hematoma)

If a trauma patient meets one or many of these criteria, the diagnosis of BCVI should be excluded with CTA or DSA.

Are guidelines available for dosing?

These guidelines cover when it is appropriate to administer various radiology procedures. In radiation protection, best practice is to deliver the lowest possible dose necessary to get the necessary diagnostic data images. We are currently undergoing a literature review to better understand best practices for dosing and will release dosing guidelines in the next phase of this project.

Which organizations participated in the development of these guidelines?

Pediatric trauma surgeons, nurses, radiologists, researchers and many others contributed to the development of these guidelines from the following organizations. We are grateful for their dedication and continued effort to improve pediatric trauma care throughout the state of Georgia.

- Children's Healthcare of Atlanta
- Children's Hospital of Georgia
- Memorial Health Dwaine & Cynthia Willett Children's Hospital of Savannah
- Georgia Quality Improvement Program
- Georgia Committee for Trauma Excellence
- Georgia Trauma Care Network Commission
- Georgia Department of Public Health

References

American College of Surgeons Trauma Quality Improvement Program. (2018). *Best Practices Guidelines in Imaging*. Retrieved from https://www.facs.org/~media/files/quality%20programs/trauma/tqip/best_practices_in_imaging.ashx

Brinkman, A.S., Gill, K.G., Leys, C.M. & Gosain, A. (2015). Computed tomography-related radiation exposure in children transferred to a level 1 pediatric trauma center. *Journal of Acute Surgery*; 78 (6):1134-1137.

Double EB et al. (2011). Long-term radiation-related health effects in a unique human population: lessons learned from the atomic bomb survivors of Hiroshima and Nagasaki. *Disaster Med Public Health Preparedness*. 5:S122-S133.

FDA (2018). "Pediatric X-Ray Imaging." 18 Jan. 2018. www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/MedicalImaging/ucm298899.html.

Miglioretti, Diana L., et al. "Pediatric Computed Tomography and Associated Radiation Exposure and Estimated Cancer Risk." *JAMA Pediatrics*, 1 Aug. 2013, pp. 700–707., doi:10.1001.

Sathya, Chethan, et al. "Computed Tomography Rates and Estimated Radiation-Associated Cancer Risk among Injured Children Treated at Different Trauma Center Types." *Injury*, vol. 50, no. 1, 2019, pp. 142–148., doi:10.1016/j.injury.2018.09.036.

Schears, R. M., Farzal, Z., Farzal & Fischer, A. C. (2018). The radiation footprint on the pediatric trauma patient. *International Journal of Emergency Medicine*, 11 (18), 1-8.

UNSCEAR (2008). UNSCEAR 2006 Report. Effects of ionizing radiation. Volume 1: Report to the General Assembly, Scientific Annexes A and B. UNSCEAR 2006 Report. United Nations Scientific Committee on the Effects of Atomic Radiation. New York: United Nations.

UNSCEAR (2013). UNSCEAR 2013 Report. Sources, effects and risks of ionizing radiation. Volume II: Scientific Annex B: Effects of radiation exposure in children. UNSCEAR 2013 Report. United Nations Scientific Committee on the Effects of Atomic Radiation. New York: United Nations.

WHO (2016). "Communicating Radiation Risks in Paediatric Imaging." 2016. Geneva: World Health Organization. www.who.int/ionizing_radiation/pub_meet/radiation-risks-paediatric-imaging/en/.



Trauma Resource Library

A Collaborative Resource Provided by the Georgia Committee for Trauma Excellence






How to Access and Utilize the Online Trauma Resource Library

1. Logging In

- Open web browser
- Go to www.georgiatraumafoundation.org
- Scroll to bottom of page to login section, "Trauma Resource Library Login"
 - ⇒ **Username:** gcte
 - ⇒ **Password:** Traum@2019

(Opens to Trauma Resource Library page)

2. Viewing and Downloading Documents

- Click on a category in the library to show the list of resources available
- Each category is labeled with the number of resources available online
- The search feature at the bottom of the page can be used to help find a resource
 - ⇒ **Note:** this feature searches the entire website, so some of the results may be events or posts on the foundation website, and not necessarily from the library
 - ⇒ **Note:** to return back to the library at any time, click on "Download Documents" at the bottom of the page
- The icons beside each resource depicts the document type:
 - ⇒  Excel Document
 - ⇒  PDF Document
 - ⇒  PowerPoint Presentation
 - ⇒  Video
 - ⇒  Word Document
- Click the "Download" button under the resource to download to your computer

3. Uploading Documents

- Scroll to bottom of page and click on the box labeled "Upload Documents"
- This will open the "Add New Document" page
 - ⇒ Add a descriptive title
 - ⇒ Click on "Choose File" to select file from your computer to upload
 - ⇒ Once selected, click on "Choose" to return to "Add New Document" page
 - ⇒ Add a brief description (this is only for cataloging on the backend, it will not be displayed in library)
 - ⇒ In the right column, under "Document Types", select the category (may be more than one) that applies to the resource being uploaded
- Once all steps above have been completed, click on "Submit for Review" in top right corner
- If uploading multiple resources, repeat the steps by clicking on "Add New" in the top left corner of the screen
- To return to library, click on "Preview Post" (which is misleading because there is no post review, but will return to library page)
- Once all resources have been submitted, please send a brief email to the GCTE Chair, Karen Hill at karen.hill@choa.org, so that she knows there is a pending review
- Document will then be reviewed by GCTE Chair to approve and post in library or respond back to with questions or comments