

When Does the Pediatric Brain Turn into the Adult Brain?

Source: Produced by Victoria Tilney McDonough and Brian King

Video Link: <http://www.brainline.org/content/multimedia.php?id=3209>

Dr. Deborah Little: The brain continues developing up until about the age of 25. And this means that our definition of pediatrics, if you ask me as a researcher, I would take that up to the age of 25 because as long as the brain is still developing, I consider that a developmental process. And now we have this problem where we're fighting two wars. In Iraq and Afghanistan we have a high rate of survival from improvised explosive devices and that high rate of survival is because of all of this protective gear that our soldiers are given. And it does a wonderful job at saving lives that in previous conflicts never would have been saved.

The problem is now they're returning back with brain injuries, sometimes with other psychiatric conditions including PTSD. The average age of injury, of brain injury, in an Iraq or Afghanistan veteran or soldier, is 19.2 years of age. So when you start thinking about what happens when they come back, you run into problems of these were high school students when they went into the military, they're coming back, they've probably never held a job. They may be looking at going back to school. This is what the GI bill is for. So now you have a brain injury and you're asking them to adapt to new educational or occupational environments. The Army and the military, the VA have done extraordinary jobs at trying to really improve care and screening for veterans so every veteran is screened when they come back and if they screen positive they're immediately asked whether they're willing to get additional services. And if they do ask for additional services to be evaluated more fully, it's mandated by the VA that they get assessed within 30 days, which I think is a model that our civilian hospitals would be, it would be hard for them to fulfill that same mandate cause that's a very difficult mandate to follow. And if they are in fact identified as brain injured and this is validated through their assessments, then they're eligible not only for disability benefits based upon the level of disability they have but also available and eligible for rehabilitation services within the VA system.

The problem is most of our veterans aren't using a VA system and don't necessarily want to get that diagnosis because that will impact their future employment. So the VA has a number of really cutting edge rehabilitation programs they're using for people with brain injury, with and without concurrent post traumatic stress disorder, ranging from medication trials to looking at the effects of Yoga to manage anxiety symptoms, which who knew the VA would fund Yoga and acupuncture but they're doing it, as is the department of defense. In the last five years, the department of defense has allocated more money for TBI then NIH has done in its entire history so it's, the positive outcome of war is that brain injury is getting a lot of the attention it finally deserves but we don't know what's gonna happen to these soldiers as they're coming back because they've been in this stressful, heightened, aggressive environment and we're adding on an injury that encourages and creates some additional problems with impulsivity and behavior. So identification becomes important.

Education of the soldier becomes important. The war fighter becomes important. But we also have to do a better job of educating the family and the support systems for the soldiers. And I

think something that we really haven't done yet is work with the soldiers in their new occupation or in a school environment, to get the same services that they would need to be successful in that because we can't send these young men and women off to war, bring them back and then not help remediate the problems they're having. So they've done a great job thus far trying to help and manage their problems that everyone knows about. But the attempts are there and I think we'll get there and probably push the whole field forward because of it.