Strategies for Athletic Trainers to Provide Effective Treatment to People With Autism Spectrum Disorder

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Given the high prevalence of students being diagnosed with autism spectrum disorder (ASD) (1 in every 68 children1) and the shift to make schools more inclusive, it is highly likely that athletic trainers (AT) will work with athletes who have ASD. However, based on previous research,2 many ATs do not feel equipped to provide services to people on the autism spectrum. ATs feel ill-prepared given that patient care skills for people with autism are not addressed in the 5th edition of the Athletic Training Educational Competencies.3 This article provides some strategies for athletic trainers to accommodate students with ASD to provide a positive experience coupled with quality care. People with ASD can vary dramatically in level of functioning. This article is intended to address those that are considered higher functioning on the spectrum, meaning those that are verbal (or have some verbal abilities) and are able to physically participate on a sport team where rule modifications are not needed.

Social Skills

People with ASD have significant difficulties with their social interactions. The deficiency varies for each individual, but some common difficulties include: initiating and ending conversation, contributing relevant information to conversations, making eye contact, identifying sarcasm, understanding where to stand in relation to others, and identifying appropriate and inappropriate topics of conversation.4 These difficulties often lead to problems, particularly in settings like an athletic training room. For example, an athlete with ASD may not recognize an AT is having a sensitive conversation with another athlete and may therefore stand right next to them. An athlete with ASD may also approach an AT who is helping another student and, without hesitation, interrupt the conversation with irrelevant information. Not recognizing the social implications of a blunt statement, an athlete with ASD may tell his teammate it is okay he is injured because “John is better in your position anyways”. In these situations,
the athlete with ASD does not recognize the inappropriate and hurtful aspect of his or her actions.

To minimize concerns, it is important to explicitly discuss social etiquette for the athletic training room. To minimize concerns, it is important to explicitly discuss social etiquette for the athletic training room.5 Athletes with ASD should be provided a short list of rules that outline the social expectations. For example, “When waiting for the AT, sit in one of these chairs” (and then show the athlete exactly which chairs to sit in). By giving concrete and explicit instructions, the ambiguity of the interaction is removed. Feedback about inappropriate social interactions is also important.5 The AT should specifically identify what was inappropriate and then provide an alternative behavior to reduce the likelihood that the inappropriate interactions will reoccur. Many athletes with ASD are visual learners,7 therefore, demonstrating the social interaction is very beneficial.

ATs should also note how athletes with ASD express their emotions. Not uncommon is an expression of emotion in an atypical manner, such as laughing when angry or in pain. Not showing much emotion in a situation that would warrant a large emotional response is another common atypical response. ATs need to learn these athletes’ emotional responses to stress and pain early in the season for correct interpretation in an emergency. Parents, coaches, and teachers are excellent resources to facilitate getting to know the athlete.

**Communication**

Even athletes with ASD who are verbal have some difficulties with communication, especially regarding pitch, volume, or tone.4,8,9 For example, an athlete with ASD make speak with a very high-pitched tone or monotone. This can complicate comprehension, especially when the athlete is distressed. This, in turn, can blur correct interpretation of their emotional state and level of pain. An alternative communication plan should be devised with athletes should communication become difficult. The most common approach utilizes pictures that communicate basic needs and emotions (e.g., “pain”, “thirsty”, “and frustrated”). If the pictures are printed on separate cards, the athlete would select the appropriate card and hand it to the AT. The other option is to have numerous pictures printed on one laminated sheet of paper so the athlete only has to point at the appropriate picture. There are also various apps designed specifically to assist people with ASD in their communication.10

Communicating using the pain scale can also be challenging due to pain’s abstract nature. Instead, consider talking with the athlete at the beginning of the season to devise a scale that makes sense to him/her. Discuss what each number or face might feel like (e.g., “this smiley face is when everything feels great and this middle face is like when you stub your toe”). A new scale that the athlete can relate to could also be constructed. For example, if the athlete is obsessed with trains, a “1” (no pain) is when the train is in perfect working order, while a “5” (the worst pain) is a train crash. For some people with ASD, imagination is incredibly challenging; therefore, using a train analogy would not be appropriate. However, for others, this is the only thing that makes sense. Given how important communication is for ATs to effectively do their jobs, it is important to find out what works best for the athlete early in the season.

Receptive communication, or understanding what a person is saying, may also be problematic.9 The AT should make specific statements, avoiding vague descriptors or jargon.11 For example, one should say “run on level 3” instead of “run at a moderate pace”, so that there is no confusion on the level of exertion. Also helpful is providing a visual representation of the instructions or a visual cue.7 For example, instead of saying, “stretch until it is uncomfortable”, say “stretch until you can touch this part of your leg” (and then lay a strip of prewrap on that part of their leg).

Many athletes with ASD have a hard time recognizing that a statement made to a group of people also applies to them.6 For example, if the AT tells everyone in the room to quiet down, the athlete with ASD may not respond because the AT did not look at him and address him by name. In this situation, the AT should repeat the instruction, making sure to first call the athlete by name. Because athletes with ASD may struggle with reading body language and facial expressions,6 shaking your head no or giving “the look” will not communicate disapproval. Instead, the AT needs to verbally express which behavior should stop and then provide an appropriate alternative behavior.

**Consistency**

Without consistency, individuals with ASD tend to feel very anxious, resulting in distraction and potentially unacceptable behaviors.8,9,12 Therefore, it is essential to provide as much consistency and routine as possible.13 Consistency may include coming to the athletic...