Students with Juvenile Arthritis Participating in Recess

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Abstract

The participation of a student with juvenile arthritis in recess can often be both challenging and rewarding for the student and general education teacher. This paper will address common characteristics of students with juvenile arthritis and present basic solutions to improve the education of these students in the recess setting. Initially the definition and prevalence of juvenile arthritis will be presented. This will be followed by a discussion of juvenile arthritis for an individual in the classroom, and possible challenges and solutions for children with juvenile arthritis in the recess setting. Lastly, specific methods of including a student with juvenile arthritis in a basketball-related recess activity will be discussed.

Definition and Prevalence of Juvenile Arthritis

Juvenile arthritis is a general term for all types of arthritis and related conditions occurring in children (Horvart, Eichstaedt, & Kalakian, 2003). The primary pathology of the disorder is inflammation of the connective tissues (Scull & Athreya, 1995). Subtypes are characterized by the number of joints involved within the first six months of the onset of the disease. Approximately 300,000 children have some form of the disease (Arthritis Foundation, 2003). Juvenile arthritis is characterized by changes in the joints such as inflammation, contractures, and joint damage (Horvart, Eichstaedt, & Kalakian, 2003).

Juvenile Arthritis for an Individual in the Classroom

When discussing the general characteristics and educational implications of individuals with juvenile arthritis, one should note the fact that children with juvenile arthritis may exhibit characteristics which affect problems with mobility, strength, and endurance. In addition to these physical characteristics which can cause an ongoing distraction in the classroom, these children may experience psychological and social impact as a result of constant joint pain and stiffness. Also, children with juvenile arthritis may experience additional symptoms that could cause distraction in the classroom as result of the nonsteroidal anti-inflammatory drugs (NSAIDs) they often take. These symptoms may include stomach pain, nausea and vomiting, and headaches (Horvart, Eichstaedt, & Kalakian, 2003).

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Possible Challenges for Children with Juvenile Arthritis in the Recess Setting

As a result of many characteristics associated with juvenile arthritis, including those associated with medicines used to treat symptoms of the disorder, special considerations must be made to properly instruct a student with juvenile arthritis in the recess setting. Before a discussion of possible challenges present when working with individuals with juvenile arthritis in this setting, it should be noted that exercise common to recess has been shown to have many benefits such as the following:

- Maintains joint flexibility
- Maintains muscle strength
- Helps regain lost motion or strength in a joint or muscle
- Helps reduce pain
- Makes functional activities, such as walking or dressing, easier
- Improves general fitness and endurance
- Maintains bone density (Kids Exercise, 2009).

It also should be stressed that teachers should provide a variety of activities during recess, some more structured than others, to accomplish the many goals of recess including the improvement of social skills and movement-related skills.

It goes without saying that the environment of recess is different than that of a classroom, and although all challenges to working with a student with juvenile arthritis may be present, a variety of special challenges may be of more concern in recess. As a result of the previously-noted special challenges associated with juvenile arthritis such as mobility, strength, endurance, pain, psychological and social impact, safety concerns may be especially important to note.

Possible Solutions to Challenges for Children with Juvenile Arthritis in the Recess Setting

The following chart notes possible characteristics associated with children with juvenile arthritis and possible solutions to these challenges in recess. It is important to remember that not all of these characteristics are prevalent in all individuals with juvenile arthritis and not all of these solutions will be successful when working with all children with juvenile arthritis. They do, however, represent a solid foundation. It is also important to remember that avoiding movement will usually weaken muscles and increase pain. Also, even during flare-ups, moderate activity common to recess is necessary and although the benefits of this exercise may not be immediately obvious, in time, well chosen exercises will pay off (Kids Exercise, 2009).

One important factor to remember for students with juvenile arthritis or any such medical condition in recess is to develop an environment that is cooperative. Such a cooperative environment would seem to lead to a high comfort level which would in term seem to be beneficial to many children with juvenile arthritis. This is the case as an uncomfortable environment is often characterized by negative psychological and social feelings which can often lead to feelings of a poor self-concept, depression and isolation, withdrawal and

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paranoia. Table 1 lists some possible characteristics of the student with diabetes and possible solutions that can be used in recess to lead to a comfortable and beneficial environment. Following this chart a specific case incorporating modification procedures for including a student with juvenile arthritis in a recess activity related to basketball will be discussed.

Table 1Concepts to Remember About Characteristics of Juvenile Arthritis in Recess

Juvenile Arthritis Characteristics	Important Items to Remember in Regards to Characteristics
Mobility Problems	 Joint tightness can be reduced by exercise such as during recess. Without movement, joint deformities may occur, making it impossible to straighten the joint Modify and provide movement activities to avoid direct competition Modify movement activities in which students need to quickly change directions
Strength Problems	 Modify strength activities in which the student is forced to be in direct competition Modify activities in which the student is forced to use strength
Endurance Problems	 Modify activities involving endurance to avoid sudden movement Schedule time for rest during recess – allow student to do this in private if desired
Pain Problems	 Exercise can reduce joint pain. Limit the repetitions of more demanding activities - especially when the student has not been feeling well
Psychological and Social Impact	 Modify activities in which "winners" and "losers" are often displayed Schedule time for rest during recess – allow student to do this in private if desired
Safety concerns	 Joint tightness can be reduced by exercise. Without movement, joint deformities may occur, making it impossible to straighten the joint and possibly leading to injury Limit the repetitions for some activities as tired students are more susceptible to injury
Side effects from nonsteroidal anti-inflammatory drugs (e.g. stomach pain, nausea and vomiting, and headache)	 Determine the immediate health of the student in order to avoid worsening the possible side effects of the medicine including stomach pain, nausea and vomiting, and headache

Methods of Including a Student with Juvenile Arthritis in a Basketball-Related Recess Activity

For the purpose of discussion of including a student with juvenile arthritis in recess, students will be participating in a simple activity in which students are divided into groups of approximately five, each group at its own basket. The groups will be shooting,

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one student at a time, from marked spots on the floor. The other four group members obtain the rebound, pass to each other, and back to the shooter. Each shooter will shoot for one minute before rotating to another shooter. The skills that will be practiced are shooting, rebounding, and passing.

To appropriately include an individual with juvenile arthritis the following modifications should be made. Before the beginning of the activity, the student will be assessed in order of determining the current joint condition. In addition, the student should be assessed in terms of possible side effects of medicine including stomach pain, nausea and vomiting, and headache. If the student is feeling slight joint tightness it should be remembered that exercise can improve the tradition. If the student is in condition to participate the student should be allowed to rest when needed. Because of the difficulty involved in quickly changing directions during the one minute time period, the student should be allowed to take a set number of shots such as twenty without a time limit. This should also help with possible problems with endurance. It would also be beneficial to not focus on comparing the number of shots that each student makes. Instead, students should look to compare and improve upon their own trials.

Conclusion

The participation of a student with juvenile arthritis in recess can often be challenging and rewarding for both the student and teacher. These social and movement-related rewards can manifest themselves in the ability of the teacher to guarantee the safety of all students in an instructionally sound environment. This paper has hopefully addressed some basic concerns and solutions to improve the recess setting of students with juvenile arthritis.

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