Youth Sports Culture

Joel S. Brenner, MD, MPH, FAAP
Medical Director, CHKD Sports Medicine Program
Chairperson, AAP Council on Sports Medicine and Fitness
8th Annual Pediatric and Adolescent Sports Medicine Update

Objectives

- The learner will understand readiness to play in young athletes
- The learner will be able to give guidance to parents and athletes on ways to prevent overtraining and burnout

DISCLOSURE

Neither I, Joel Brenner, nor any family member(s), have any relevant financial relationships to be discussed, directly or indirectly, referred to or illustrated with or without recognition within the presentation.
A parent-coach is frustrated with his 5 yr old travel basketball team. He asks you how best to prepare 5 yr olds to play an organized basketball game.

Is a 6 yr old ready to run track?

Definition: Matching a child's level of growth and development and the tasks or demands of a sport.

Chronological age is not a good indicator because motor skills are learned at different ages (but predictable sequence).

If coaches and parents lack knowledge
  Unrealistic expectations
  Loss of self-esteem and withdrawal from sport
Physical Growth and Development

- Essential to learn skills
- Example: In order to kick a ball one needs to have the strength and balance to stand on 1 leg to swing the kicking leg

Cognitive Development

- Essential to participate in most organized sports
- Understand the need to stay in position or remember instructions
- Understand basic rules and strategy
- Ability to follow directions and interact with teammates

When are they Ready?

- Sport-related skills
- Knowledge about the sport
- Motivation
- Socialization
When are they Ready?

* Use informal participation with friends as gauge

CONCLUSION:
Remove adults

Children naturally select and modify activities to be successful and have FUN

15 y.o. elite swimmer who trains year-round and competes internationally presents with a chief complaint of fatigue and muscle soreness.

3 practices per day 6-7 days per week starting at 0400 until 2100.

Previous laboratory studies performed by another provider were all normal

Burnout

* Currently little research in young athletes

* Spectrum of conditions that include Overreaching and Overtraining

* Overreaching: intense training that leads to decreased performance and psychological symptoms

* Full recovery after rest
Overtraining syndrome

- Extreme overreaching
- Longer performance decrement (>2 months)
- More severe symptoms
- Maladaptive physiology
- Uniqueness in children: More of a psychological component

Burnout

- “Response to chronic stress in which a young athlete ceases to participate in a previously enjoyable activity”
- R.E. Smith 1986
- Epidemiology: unknown due to lack of standard terminology
- 30-35% experience overreaching

Stages of Burnout in a Young Athlete

1. Placed in a situation with varying demands
2. Demands perceived as excessive
3. Experiences varying physiological responses
4. Burnout consequences develop (i.e. withdrawal)

R.E. Smith 1986
Factors Related to Burnout in Young Athletes

- Environmental Factors
  - Extremely high training volume and time demands
  - Little personal control in sport decision making
  - Demanding performance expectations
  - Negative performance evaluations

- Personal Characteristics
  - Perfectionism
  - Need to please others
  - Low self-esteem
  - Focusing only on one’s athletic involvement

Symptoms of Overtraining Syndrome/Burnout

<table>
<thead>
<tr>
<th>Fatigue</th>
<th>Insomnia</th>
<th>Loss of appetite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>Irritability</td>
<td>Weight loss</td>
</tr>
<tr>
<td>Bradycardia or Tachycardia</td>
<td>Agitation</td>
<td>Lack of concentration</td>
</tr>
<tr>
<td>Loss of motivation</td>
<td>Decreased self-confidence</td>
<td>Sore muscles</td>
</tr>
<tr>
<td>Hypertension</td>
<td>Anxiety</td>
<td>Restlessness</td>
</tr>
<tr>
<td>Sleep disturbances</td>
<td>Nausea</td>
<td>Frequent illness</td>
</tr>
</tbody>
</table>

Diagnosis of Overtraining Syndrome/Burnout

- History
  - Decreased performance
  - Disturbances in mood
  - Lack diagnosis of other causes of underperformance
  - Lack of enjoyment
  - Presence of potential triggers
- Testing (if indicated)
  - Profile of Mood States (POMS)
Treatment

- Rest or relative rest is key intervention
- Treat any underlying organic disease
- Consultation with mental health expert
- Treat depression, anxiety and sleep disturbances
- Upon return to sports make expectations more realistic and correct adult-controlled factors

Prevention

- Avoiding overscheduling and excessive time commitment
  1. 1-2 days off/ wk to recover physically and psychologically
  2. 2-3 months off from specific sport
- Consider using POMS to monitor
- Emphasize skill development and FUN
- Young athletes should have fun while participating in sports and learn lifelong physical activity skills.
Suggested Readings


Thank You
757-668-PLAY