PARENTAL ROLE IN SPORTING INJURY

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Doctors often only see kids who are injured and not the thousands that are not. Our opinion on the parental role in injury can therefore be skewed towards the negative as we only see injured children; no one tells us about the kid who kicked three goals on the weekend. The negative side is seen in parents who push kids to play through injury, promote aggressive playing styles that result in the injury of their own and other children and promote excessive training loads. Excessive training loads are most notably seen in the '10,000 hour parents' who believe the theory that someone must practice something for 10,000 hours to become competitive at a professional level. Overwhelmingly however, the role of parents in sports injuries is positive. They are the basis of all junior sporting organisations, playing roles as coaches, trainers, administrators and supporters. They set the tone of a club for development of children's skills and attitudes towards how they play. Parents also play a key role in injury by promoting prevention, recognising injury risk, recognising the injury itself and, most commonly, managing its treatment.

Childhood sporting injuries arise from two sources:

1. A single major impact.
2. Repetitive microtrauma in the form of overuse injuries.

Half of all paediatric injuries are overuse injuries of which 50% are likely preventable[1]. In some sports, overuse injuries account for the majority of injuries[2]. Acute and chronic injuries of the growth plates may account for up to 12% of childhood sporting injuries, potentially having long-term negative effects on growth and development[3].

PARENTAL ROLE IN CONTACT INJURY

Concussion is not the most common contact injury but it is currently very topical. It is a good injury through which to analyse the roll of parents in injury because it is often difficult to recognise, thus requiring vigilance at home. While it may seem fairly arbitrary, the phrase "You just know" is an important one for a complex injury such as concussion because it is the parents who know their children best and are therefore most likely to recognise a problem.. The issue is that if "you just know" a child is not concussed, you have to be able to prove it. At lower levels of sport, parents don't have access to detailed concussion testing tools, or the knowledge of how to use them. However, they do know their kids. So, if a parent thinks their child is concussed or 'not right', they should be considered concussed. The parents will be right 99% of the time. It is then the responsibility of coaches and trainers to listen to the parents' opinion. The adage, 'if in doubt, sit them out', will protect kids from the potential long-term negative effects of continuing to play with an undiagnosed concussion.

The recent Zürich guidelines produced the childSCAT3 for children between the ages of 5 and 12[4]. It involves a detailed assessment of child symptoms and signs of concussion, and the observations of the parent. It can be downloaded from bjsm.bmj.com/content/47/5/263.full.pdf. A trainer at each club should be able to use and interpret it.

Whether they go to hospital for observation or not, eventually the parents will be left to look after their injured child at home. The parents' role, in conjunction with their doctor, is to guide the child through the initial phase of injury, return to school and then return to sport.

As a good rule of thumb, if the parent is at all concerned about the health of their child in the first 24 to 48 hours after injury, they should take the child to hospital. More specifically, they should look out for new or increasing headache, nausea or vomiting, neck pain, drowsiness, difficulty recognising people or speaking or any numbness, tingling or weakness[4].

After the initial phase of the injury, parents need to guide their children to return to school. Concussion can be thought of as a sprain of your brain. Just like an ankle sprain, you wouldn't run on it the next day – you rest until your symptoms settle, then gradually increase the difficulty and intensity of your exercise until you are ready to return to play. 'Thinking' for the brain is like 'running' for an ankle. The child needs to be medically cleared, then gradually increase the time they spend thinking and concentrating. This may require them to have a couple of days off school to let their symptoms settle (just like an ankle), then get back into school sessions (i.e. thinking and concentrating) gradually. This may require changes in class times, increased rest periods and variations to tests and exams[4].

Only after the child has returned to school should they return to sport. This once again needs to be gradual, with slowly increasing loads. It takes children longer to recover from a concussion so parents must be sure of the following before allowing their kids to return to competition:

- They have no symptoms.
- They returned to school successfully.
- They have gradually increased their training load.
- They have been medically cleared[4].

> ***Managing training load is a parent's most difficult role in preventing injury***

PARENTAL ROLE IN OVERUSE INJURIES

Overuse injuries in the form of growth plate injuries in younger children and stress fractures and tendon injuries in older kids form 50% of the injuries suffered by children[1].

Overuse injuries simply arise from training too much, too frequently or too intensely. Managing training load is a parent's most difficult role in preventing injury. Commonly, kids want to play multiple sports because it is fun. This can result in daily training or multiple training sessions per day, and two or more games throughout the week. During periods of finals for one sport and pre-season for the next sport, numerous sports can cross over, demanding multiple training and games from the child. To add to this, kids commonly play their sport of choice at school over lunch, and have physical education classes throughout the week further, adding to their total amount of exercise.

This is made more difficult by the perception in some sports that you need to perform 10,000 hours of practice to be competitive, driving some parents to push kids to train many, many hours per week. Further to this, there is an expectation (or misunderstanding) that the child needs to play at every game to be selected for the next level of competition, where in reality, they just need to play well in a limited number of games. Selectors will work out very quickly what a child is capable of doing athletically – for the rest of the games they just work out what they are not capable of doing. To be selected for higher levels of competition, being uninjured and not fatigued so the athlete can play well every time they play is more important than playing every game.

Further to these pressures, parents are not helped by certain sport governing bodies that mandate that children must play at the lower levels of their sport if they are to continue to play at the high levels. This clearly goes against recommendations[1], and results in kids playing up to three games per week plus training every day, sometimes morning and night.

Finally, schools themselves can be a problem, particularly when the child is on a sporting scholarship, where money and education become tied to their sporting performance.

The parents' role in overuse injuries is to navigate through all the above issues, and at times say, "No, that's enough". This can be very difficult, if not nearly impossible, at times. But an injured child cannot play with friends or perform well enough to make the next level of competition. Warning signs parents can look for include:

- daily training sessions,
- multiple games per week,
- no days off,
- increased fatigue or tiredness,
- falling asleep at school,
- unexplained decreases in performance,
- quick return to full training after injury and
- overlap between one sport ending and the next starting.

Other key periods of risk of injury include using new equipment (e.g. new shoes, racquet) and starting with a new coach.

For female athletes, the delayed onset of menstruation, irregular menstruation after they have become regular or menstruation completely ceasing for a period of time (amenorrhea) is a key indicator of female athlete triad. This occurs due to a combination of too much training and not enough eating and results in low bone density predisposing to stress fractures and osteoporosis in the future. Referral to a doctor is essential to address this early[5].

> ***being uninjured and not fatigued is more important than playing every game***

Overuse injury can be recognised as a complaint of pain in any area. In the early stages children may only complain of pain during high intensity activity such as kicking, jumping or sprinting and otherwise have no problems. Running athletes most commonly experience overuse injuries in the achilles, knees and feet, while throwing or overhead athletes (such as in baseball and swimming) develop elbow and shoulder problems.

But how do parents actually manage playing and training load? The traditional teaching is to increase load by 10% per week[6]. This is achievable if you are pitching, bowling or performing a sport where you can count what the kids are doing. But with a child playing for multiple teams, with multiple coaches and playing every lunch time at school, predicting, let alone implementing, a 10% increase each week is difficult. As another rule of thumb, kids should have 1 to 2 days off per week from all games or competitive training, one training session per day and one game per week[1]. A good coaching team will vary intensity and duration throughout the week, with lighter training sessions in the days after and just before games. Once again, this can be problematic if a child is training across several teams.

For kids that need to decrease their training to manage or avoid an injury, a good trick is to get them to pick their favourite sport and stop the others. Cease all extra training activity such as extra runs, running to or at school or extra work after training that is not directed by the coach. More elite stream kids can limit the amount of lunch time sport they play and negotiate with school to use physical education classes and sport sessions as part of training, doing gym work or cross training.

Much of the time, managing coaches can be more of a struggle than managing the kids. Kids find it nearly impossible to say no to a coach and need parental assistance. For coaches of lower level teams where the child may be mandated to play, negotiate minimising training while continuing to play for the team. This generally keeps the coach happy as they have their best kids still playing for them, and the child may still train with the team once per week so they don't appear unfairly advantaged. If it becomes impossible to find a middle ground, get all coaches, parents and the child in a room and discuss an agreed training regimen that everyone signs off on. A doctor or sports psychologist are a good resource as mediators.

Finally, parents may just have to say "No". This can be difficult for the child in some circumstances, as until they are injured, it is difficult for kids to understand that there can actually be 'too much'.

PARENTAL ROLE IN RETURN TO PLAY

Once the child returns to play, no-one wants a recurrence of the injury. Unfortunately, depending on the sport, recurrences can occur in up to 49% of cases[2]. In the medical environment it is not uncommon for a parent to be pushing to get the child back for the next 'big game', or just pushing to maintain training. They are, unfortunately, balancing the excitement of playing, against the risk of not playing for the rest of the season. Although parents generally draw on the advice of doctors and allied health for when it is safe to return to play, parents should carefully assess their child's readiness.

Parents play a key role in their child's return to play, ensuring completion of rehabilitation programmes, gradual increases in load and adequate recovery. In the setting of team sports, a good rule of thumb for when a child can safely return to play is after a child has completely rehabilitated from an injury and then completed 2 weeks of full training. This will help decrease the risk of re-injury. If this is not achieved, and sometimes even if it is, limiting game time in the first one to two games may be the difference between a recurrence and a successful completion of the season.

CONCLUSION

Although at every club there is a parent that screams and yells at their child from the sideline, or makes them train hour after hour each week, these are the exception and not the rule. It is only because they can be so vocal and their behaviour so out of proportion to the norm that they unfortunately appear so common. Parents play an essential, positive role in sporting injury prevention, injury management and returning the child safely back to school and sport. Recognising this role and supporting them to do so becomes an essential role of all medical practitioners.

References

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