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Title: **Activity Restrictions in Children With Idiopathic Thrombocytopenic Purpura**

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It is normal and healthy for children and adolescents to be active - to run, play, and engage in informal activities or structured sporting events in which injury may occur. Most children with ITP are otherwise healthy and accordingly derive much joy from their play and sports activities. Therefore, one of the biggest disappointments for a child with ITP is being told to restrict play and sports because of a low platelet count. Such restrictions, advised by the doctor and implemented by the parents and school officials, are often unpleasant for the school-age child and may result in tears, depression, and outright anger. These responses in turn may lead to stress and a feeling of helplessness and frustration on the part of the parents and are frequently accompanied by poor compliance by the child, who may then take every opportunity to jump from greater heights than ever and/or bump heads with his or her peers.

So what is the evidence that activity restrictions are necessary in children with ITP? To put it another way, what platelet count is necessary in order to feel assured that a child can engage without risky in normal play? In physical education exercises at school? In "non-contact" sports such as basketball, baseball, and tennis? In competitive contact sports such as football (English or American style)? Well, to our knowledge there are no scientific data at all on which to make decisions in this area. Therefore, like most other ITP management decision making, it depends greatly upon the individual physician, parents, and child.

Physicians who are not familiar with ITP (and who are therefore frightened by a low platelet count, fearing that it almost surely will lead to significant bleeding) generally overestimate the risk of bleeding and place excessive restrictions on the child. It is our belief that most activities that the child engaged in before developing ITP will continue to be safe as long as some common sense precautions are taken. If the child with chronic ITP generally has platelet counts above 50,000 per mm<sup>3</sup> and exhibits no bruises or petechiae, we believe that virtually any organized and supervised sports activity (except boxing) can be undertaken safely as long as the patient and parents understand that the risk of hemorrhage in the brain or elsewhere following a serious injury is theoretically higher than in someone with a normal platelet count. For the child with minor bleeding signs (some petechiae and purpura) typically associated with platelet counts in the 20,000 to 50,000 per mm<sup>3</sup> range contact sports guaranteed to cause head bumps are, of course, forbidden. However, other play and athletic activities are condoned or even encouraged as long as they are done under supervision and with precautions (e.g., wearing a helmet when batting or bicycling). We find this strategy acceptable even when the platelet count is under 20,000 per mm<sup>3</sup>. Sure, the child may develop a few more bruises than he or she would otherwise, but the joys of normalcy - being able to play with his or her peers rather than staying home or watching from the sidelines - are critically important. Anything to enhance the child's quality of life must take first priority.

One of us has had over 25 years experience dealing with children with bleeding disorders, and despite this rather liberal approach to activity restrictions no intracranial or other serious bleeding has been encountered. Not even once has there been a rejoinder from a parent that they regretted having their child be as active as possible.

Finally, sports and play activities do play a role in therapeutic decisions, especially in children with chronic ITP. If the child with a 30,000 per mm<sup>3</sup> platelet count and easy bruising was a champion skier, gymnast, or football player prior to developing ITP and is depressed by having activities restricted due to the ITP, then a good case can be made for that child having a splenectomy.

These are our views. They perhaps differ with those of other physicians. Obviously, each patient, their parents, and their health care providers must feel comfortable with whatever recommendations are made in this controversial area.