

# Knock behind knee essay sample



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A hard knock in the leg to the area behind the knee would certainly be painful. This area is called the popliteal fossa. The nerves most important nerve traveling through this area is the popliteal nerve that travels to the lower leg and foot and allowing both sensation and motor strength. Injury to the popliteal nerve can cause numbness, tingling, pain, and weakness in the lower leg, ankle and foot. Vascular injury could cause a bleed from either popliteal artery or vein causing a hematoma or blood pool that could cause significant pain in that area.

The main types of injury would include soft tissue, muscle, nerve, and artery/vein, ligaments and menisci. A skin and soft tissue injury could include a mild contusion with some redness or bruising. Scratches may occur. If there is a deeper penetration and not appropriate wound care, an infection could form causing a skin and soft tissue infection known as a cellulitis.

Injury to the muscle could include a tear of the plantaris muscle which travels through the area of the popliteal fossa. Tear of this muscle will not result in too much deformity or motor deficits, but can cause significant pain. The hamstrings insert near the region of the popliteal fossa and could be affected as well causing pain, but unlikely deformity or decreased range of motion. Damage to the artery or vein would mean rupture of either the popliteal artery or vein or smaller branches of these large vessels. This would cause a major bleed that would occur in that region and because it is contained it would likely cause a large hematoma or collection of blood. This would be extremely painful and might require surgical evacuation and vascular repair. Nerve damage is possible causing symptoms such as numbness, tingling, pain, and weakness that extend from the knee down the

lower leg and foot. Compression of the nerve by a hematoma would result in similar symptoms. Damage to the ligaments can result in severe pain and disability.

The posterior cruciate ligament and the lateral ligaments: the medial collateral ligament and the lateral collateral ligament commonly occur with injury during sports and can cause severe disabling pain and motor dysfunction. These are the main ligaments that allow for smooth motion during knee flexion and extension and a tear which occurs commonly often requires invasive surgical repair. Finally the menisci which are cartilaginous structures found inside the knee joint that allow for smooth movement of the bones in the leg. A meniscal tear can occur in a sports accident as above with the ligamentous injuries and cause significant pain and decreased range of motion at the knee. This may likewise require surgical evaluation and correction to restore function and eliminate pain. Because the knee is a complicated region and the back of it has many important structures including veins, arteries, nerves, and muscle components, a hard knock to the knee can be extremely debilitating and should be avoided whenever possible. Protection of the knee with appropriate gear is critical when dangerous activities are being attempted.

Reference:

Mercier, Lonnie R.. Practical orthopedics. 4th ed. St Louis, Missouri: Mosby, 1995. Print.