Case Authors (708) Knee dislocation with stop arterial. emergency!!

E. Alias Carrascosa, M. Sanchez Robles, M.v. Redondo Carazo, M.d.c. Gutierrez Sanchez, M.f. Cegarra Navarro, P. Aleman Diaz.

Centre Hospital General Universitario Reina Sofia.

CASE PRESENTATION

19-year-old male consults for falling while traveling on a motorcycle at low speed suffering direct contusion at knee level with great functional impotence. No chest pain, no dyspnea, no abdominal pain. Immobilization is performed on suspicion of fracture and sent for assessment. After physical examination, great functional limitation is evident with intense pain on exploration at right knee level.

Great edema and effusion, blockage and limited flexo extension. Linear erosion at tibial anterior face level. Hematoma in the posterior region of the knee. Present and symmetrical sensitivity. Weak pulse. Preserved temperature.

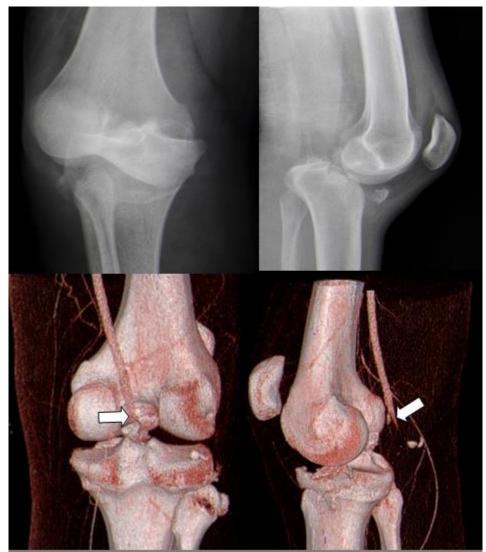
DISCUSSION

If a fracture is suspected, RX is requested to show fracture of tibial spines with associated dislocation. If vascular injury is suspected, urgent CT angiography is requested, where a fracture of the tibial plateau with several intra- and extra-articular bone fragments is observed, a non-displaced fracture of the head of the fibula and sharpening of the popliteal artery with absence of distal flow, as well as a large hematoma of soft tissue in the posterior region of the knee.

CONCLUSION

For a successful result in vascular injuries associated with fracture, it is of great importance to pursue the principles of early and accurate diagnosis, resuscitation, revascularization, and soft tissue preservation and fracture stabilization. Controlling bleeding in such patients is lifesaving. Popliteal arterial injuries associated with bony injuries have a high amputation rate. Such injuries usually involve venous and soft tissue components.

The rate of amputation decreased thanks to the developments in shock therapy, use of antibiotics, better bone stabilization by external fixators, treatment of bone defects by internal bone transport, soft tissue reconstruction such as local and free flap and rapid transportation.



AP (A) and lateral (B) knee Rx: Right knee Dislocation-fracture. Angio-TC with 3D reconstruction (C,D): popliteal artery stop (arrow) and fracture tracts with tibial fragment displacement to the intercondylar space

BIBLIOGRAPHY

- Subasi M, Cakir O, Kesemenl C, Harslan H, Necmioglu H, Eren N Popliteal artery injuries associated with fractures and dislocations about the knee Acta Orthopædica Belgica, Vol. 67 - 3 - 2001