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Prostatic abscess as the cause of iliac vein compression syndrome in a dog

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Prostatic abscess in the dog causes nonspecific clinical signs, since difficulties in urination to septic shock. In human medicine, the iliac vein compression syndrome (IVCS) is a disorder of the pelvic venous disease not post-thrombotic, due to the compression of abdominal blood vessels by pelvic or abdominal masses, dysfunction of the pelvic and / or retroperitoneal veins, affecting the venous system of the inferior vena cava. We report the case of a non-castrated male dog, 10 years old, German Shepherd, referred to the UFMG Veterinary Teaching Hospital. The animal presented with cold swelling of the hind limbs, prostration, reluctance to walk, pelvic limbs with severe swelling and purulent secretions in various skin regions, more pronounced in the right limb (chronic symptoms according to the owner), and in severe sepsis. Upon abdominal Focused Assessment for Sonography in Trauma (FAST) it became evident an enlarged prostate gland, with defined boundaries, and presence of a internal rounded hypoechoic structure compatible with prostatic abscess. In addition, it was found the presence of blood stasis in some abdominal vessels, mainly in the iliac veins with partial and bilateral compression. The Doppler vascular blood flow was observed in both hind limbs, but with smaller flow in the right limb. It was also conducted a thermography, revealing a T delta greater than 6 °C. After 12 h of clinical stabilization, laparotomy was performed and a prostate gland approximately 15 cm in diameter with fused microabscesses was found, associated with compression of the iliac veins, both internal and external. Prostate drainage and omentalization were performed, which allowed an immediate return of normal blood flow, and also orquiectomy and antibioticotherapy. After observing the compression of the iliac veins during laparotomy, associated with clinical signs, the diagnosis of iliac vein compression syndrome was achieved. However, the animal died 15 h after surgery, due to reperfusion injury, even with anti free radical therapy postoperatively. In men, the treatment of choice is the endovascular technique in combination with balloon angioplasty and stent placement, allowing the return of blood flow. In dogs, prostatic abscesses are commonly treated as described above, but in cases where there is no return of normal blood flow, it may be needed endovascular treatments such as described for the man. Considering the potential complications of this syndrome, the symptoms of the compression of the iliac veins should not be neglected in cases of prostatomegaly (abscess, BPH). Early diagnosis is mandatory to provide a treatment as soon as possible achieving a decrease of the prostate gland size, before it causes irreversible changes in the venous system of the patient. To our knowledge, this is the first report of a case of iliac vein compression syndrome in the dog.