Pulses never lie: Detecting painless aortic dissection in a stroke-like presentation

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Introduction:
Aortic Dissection remains a formidable medical emergency, presenting a unique and challenging diagnostic puzzle due to its diverse range of manifestations. This critical condition, characterized by a tear in the aortic wall, demands urgent attention as it can lead to life-threatening complications. Typically, patients with aortic dissection experience excruciating pain, aiding in its recognition and timely management. However, there exists a less common and more insidious variant – painless aortic dissection, which poses a diagnostic dilemma due to its atypical presentation.

Case presentation:
We report a case of painless aortic dissection in a 48 years old previously healthy man. He presented with an acute onset of left sided paralysis for 6 hours. Physical exam revealed a cool, pale and pulseless left lower extremity with a power of 0/5 and absent sensations. The right lower extremity was warm with palpable pulses and a power of 5/5. Pulse status was confirmed with doppler. Computed tomography angiography of the chest, abdomen and pelvis revealed a Type B dissecting aneurysm arising distal to the left innominate artery down to the bifurcation of the abdominal aorta. The patient’s initial presentation of left sided lower limb paralysis mimicked a cerebrovascular accident. The differentiation between the aortic dissection and cerebrovascular accident is crucial, especially when thrombolytic therapy is considered. However, detailed examination of the extremity including neurological examination, palpation of pulses and blood pressure measurement of all four limbs played a major role in differentiating aortic dissection from other causes of sudden onset paralysis.

Discussion:
This case emphasizes the need for heightened clinical awareness and vigilance among healthcare professionals. A thorough physical examination in patients with sudden-onset paralysis including palpation of peripheral pulses and blood pressure measurements in all four limbs can provide critical clues to suspect aortic dissection.

Conclusion:
Timely diagnosis of aortic dissections is crucial, as there is a 1% increase in mortality for every hour delay in diagnosis and management. Vigilance and attention to detail are paramount in diagnosing and treating such rare occurrences, underscoring the complexities of medicine and the need for comprehensive patient care.

Keywords:
Aortic Dissection, Aorta, Abdominal, Paraplegia, Stroke