

Physician - Peripheral Artery Diseases and Surgery/Percutan Interventions

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Middle Aortic Syndrome in An Adult Presenting with Limb Ischemia

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Middle aortic syndrome (MAS) is a segmental narrowing of the distal descending thoracic or abdominal aorta. This rare condition accounts for 0.5 to 2% of aortic coarctations. Middle aortic syndrome may be acquired, caused by Takayasu arteritis or giant cell arteritis, neurofibromatosis, fibromuscular dysplasia, retroperitoneal fibrosis, mucopolysaccharidosis, and the Williams syndrome, or it may be congenital. Stenosis is usually located at the suprarenal, interrenal, or infrarenal aorta. Concomitant stenoses in the renal (63%) and visceral (33%) arteries may be encountered. In this case report, we presented a 66-year-old male patient with MAS. The patient's primary complaint was claudication and rest pain in the last three months. The patient had hypertension for two years and a history of lumbar disc hernia operation. Thoracoabdominal computed tomography angiography revealed an enlarged ascending aorta, an aberrant right subclavian artery, and a narrowed segment with an hourglass appearance in the infrarenal aorta. The vessel diameter decreased to 9×10 mm at this level, and both iliac arteries were occluded distally. The patient underwent aortobifemoral bypass surgery with a 14/7 mm Dacron graft. In the postoperative period, all distal pulses were palpable, and leg pain resolved. The patient was discharged from the hospital on the sixth day without complications. This case report presented an adult MAS patient with rest pain in the legs related to occluded iliac arteries and aortic bifurcation. The coarctation in the infrarenal aorta was successfully treated by open surgery (aortobifemoral bypass). Children may benefit more from early diagnosis before the onset of severe hypertension. Open surgery is the primary treatment modality for tubular MAS. Usually bypass of the diseased segment or, less often, patch angioplasty is preferred. Bypass grafting of the stenosed renal and visceral arteries is performed when necessary. Endovascular therapy may provide less invasive treatment.

Keywords: Aortic coarctation, endovascular therapy, middle aortic syndrome, surgery.



Figure 1. Computed tomography angiography shows an enlargement in the ascending aorta and coarctation in the infrarenal aorta.



Figure 2. Computed tomography angiography shows a narrow segment with an hourglass appearance in the infrarenal aorta and occluded iliac arteries.

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