

Venous Malformations of the Head and Neck



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KEYWORDS

• Venous malformation • Head and neck • Vascular malformation

KEY POINTS

- Venous malformations (VMs) arise from deficits in the development of venous network, leading to dilated and dysfunctional venous channels that are deficient in smooth muscle cells.
- Clinical features of head and neck VMs are highly variable, ranging from small and asymptomatic varicosities to massive cervicofacial lesions.
- Several therapeutic approaches exist, including surgery; laser photocoagulation; sclerotherapy; and, more recently, systemic targeted drugs.

With an incidence of approximately 1 in 2,000 to 5,000, venous malformations (VMs) represent a vascular malformation frequently observed in specialized multidisciplinary centers.¹ They arise from deficits in the development of the venous network, leading to dilated and dysfunctional venous channels that are deficient in smooth muscle cells. These slow-flow venous sacs progressively expand with stagnation of venous blood. This results in growing lesions that do not spontaneously regress, and that ultimately infiltrate and compress normal adjacent tissues.^{2,3}

More than 40% of VMs occur in the head and neck (H&N) region, representing, with infantile hemangiomas (IHs) and lymphatic malformations (LMs), the third most common vascular anomaly affecting this area.^{4,5} Clinical features of H&N VMs are highly variable, ranging from small and asymptomatic varicosities to massive cervicofacial lesions. These VMs are not only disfiguring but also induce functional comorbidities with potential life-threatening complications. Several therapeutic approaches exist, including surgery; laser photocoagulation; sclerotherapy; and, more recently,

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