

# Editorial on Lymphatic Malformations

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## Editorial

The most frequent congenital vascular lesions are vascular malformations (VMs), which are caused by abnormalities in vascular development during embryonic life. Unlike hemangiomas, which proliferate and normally involute, they do not proliferate but steadily increase and do not involute. There was a lot of uncertainty over vascular lesions' nomenclature in the past. In the previous two decades, there has been a significant shift in our understanding of congenital VMs, notably in terms of categorization, anatomy, pathophysiology, embryology, diagnostic, and therapeutic techniques. Slow-flow (capillary, venous, lymphatic) lesions, high-flow (arterial) lesions, and combination slow/fast-flow lesions are now the three classifications for VMs. LMs (formerly known as lymphangiomas) are categorised into microcystic lesions (previously known as lymphangioma circumscriptum), macrocystic lesions (previously known as cystic hygromas), and a mixed form based on the size of the lymphatic lumen. As a result, the term cystic hygroma has been superseded by macrocystic LM. Down syndrome and other trisomy disorders, Turner syndrome, hydrops fetalis, Noonan syndrome, and other congenital abnormalities have all been linked to macrocystic LMs. The passage of lymphatic fluid, as well as the presence of inflammation or intralesional haemorrhage, cause lymphatic VMs to expand or shrink. Treatment options are determined by the size, location, and symptoms of the lesion. The most common indications for treatment include cosmetic impairment, recurrent infection, leaking, crusting, ulceration, and discomfort [1-5].

When they are found in the orbit or larynx, they can cause substantial functional impairment. Surgical excision and sclerotherapy are two treatments for LMs. Sclerotherapy is a method that involves injecting a sclerosant into a vessel through the skin, inducing inflammation of the vessel wall, followed by fibrosis, and finally obliteration of the vessel lumen. Alcohol, bleomycin, doxycycline, polidocanol, sodium tetradecyl sulphate, and OK32 have all been employed as sclerosants (picibanil). Sclerotherapy can be done in two ways: percutaneously or transcatheterally, with fluoroscopic supervision in both cases. Foam sclerotherapy is a novel treatment that has primarily been utilised to treat venous abnormalities. Sclerotherapy has a number of advantages over surgery, including ease of administration and safety. It's especially helpful in head and neck VMs, which frequently include numerous contiguous anatomic areas and contain key neurovascular structures, making surgical therapy challenging and sometimes unsuccessful. Furthermore, despite the fact that surgical excision is indicated for resectable lesions, recurrence is common. Sclerotherapy is a relatively safe treatment option, especially for low-flow VMs. Skin necrosis, tiny skin ulcers, urticarial responses, scarring, and allergic reactions are among the minor complications. If the patient is allergic to the sclerosant, it is not recommended. Where post-injection swelling puts another

organ at risk, such as harm to the optic nerve or airway swelling, caution must be exercised

Lymphangiomas are caused by congenital or acquired lymphatic system disorders. The congenital type is caused by the incorrect attachment of lymphatic channels to the main lymphatic drainage duct before the age of five years. Any interruption of previously normal lymphatic drainage, such as surgery, trauma, cancer, or radiation therapy, can result in acquired lymphangiomas. Differentiating superficial lymphangioma from other cutaneous lesions can be done with a dermoscopic examination. There are two unique dermoscopic patterns: yellow lacunae bordered by light septa with no blood inclusion and yellow to pink lacunae alternating with dark-red or bluish lacunae with blood inclusion. Most newly discovered lymphatic malformations will shrink in size and pain without therapy, but they seldom go away on their own. A lymphatic malformation can be temporarily reduced in size by cutting into it and emptying the lymph. This is normally only done to determine the cause of an infection or to treat it. If an ultrasound test detects the abnormalities, lymphangiomas can be diagnosed before delivery. If a doctor detects one after the baby is born, they may request an MRI, CT scan, or ultrasound to confirm the diagnosis and assess the size and significance

## Conflict of Interest

None.

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