Research Letter

Epidemiological and clinical profile of vascular malformations: Experience of the Dermatology Department of CHU Hassan II in Fes, Morocco

Sabrina Oujdi, Hanane Baybay, Siham Boularbah, Sara Elloudi, Meryem Soughi, Zakia Douhi, Fatima Zahra Mernissi

Department of Dermatology, University Hospital Hassan II, Fes, Morocco

Corresponding author: Sabrina Oujdi, MD, E-mail: sabrinaoujdi92@gmail.com

Sir,

In contrast to vascular tumors, particularly infantile hemangiomas, few publications have addressed the epidemiology of vascular malformations.

The diagnosis and management of these cutaneous vascular anomalies require a well-equipped technical platform and a wide variety of treatments. The objective of this study was to describe the epidemiological and therapeutic profiles of cutaneous vascular malformations seen in our training.

This was a cross-sectional study of patients who consulted for a cutaneous vascular malformation at University Hospital Hassan 2 in Fez, Morocco, over a period of five years (2016–2021).

A total of 134 patients, adults and children, were included in the study. The age of the patients ranged from 1 month to 58 years, with an average of 16.95 years. The adult population constituted 38.5% of the sample, and the sex ratio (M/F) was 0.48 with a clear female predominance (67.16%). 125 patients were from the Fes region (Fes, Meknes, Taza, Taounate) and nine from the oriental region (Nador, El Hoceima, Oujda, Figuigue, Errachidia). 50.7% of the patients had a low socioeconomic level, and 49.3% had a medium level. The symptomatology began at birth in 92.5% of the patients, with a maximum age of onset of twenty years. Seventy-six percent of the malformations were in the head and neck, and 24% in the limbs and trunk. Radiological explorations (echo Doppler, scanner, MRI) performed in all patients allowed the confirmation of doubtful cases. The most common vascular anomalies were plan angiomas in 55.9% (75 cases), venous malformations in 23.13% (31 cases), lymphatic malformations in 5.2% (7 cases), and arteriovenous malformations in 1.4% (2 cases). The four cases of complex vascular anomalies were Klippel–Trénaunay syndrome (3 cases) and one case of Proteus syndrome. We opted for sclerotherapy in fifteen patients with venous malformations, laser in 77 with planar angiomas, and surgery in two superficial venous malformations. A combination of sclerotherapy and rapamycin was employed for lymphatic malformations.

Venous malformations are more frequent than arteriovenous malformations [1,2].

Female involvement was predominant in our series, which could be explained by a greater therapeutic demand because of the aesthetic damage.

It is necessary to differentiate plane angiomas with nodules on the surface from tuberous hemangiomas with a nipple aspect. Plane angiomas, unlike hemangiomas, are present at birth and worsen with age.

Note that two venous malformations in our series were wrongly diagnosed and treated as subcutaneous hemangiomas. Venous malformations, unlike subcutaneous hemangiomas, are characterized by an increase in size during the Valsalva maneuver. They are present at birth and the evolution is toward aggravation with age and does not improve under propranolol.

How to cite this article: Oujdi S, Baybay H, Boularbah S, Elloudi S, Soughi M, Douhi Z, Mernissi FZ. Epidemiological and clinical profile of vascular malformations: Experience of the Dermatology Department of CHU Hassan II in Fes, Morocco. Our Dermatol Online. 2023;14(4):449-450.
Submission: 02.03.2023; **Acceptance:** 01.08.2023
DOI: 10.7241/ourd.20234.24

The diagnosis of lymphatic malformations is easy when they are associated with superficial lesions, although the main differential diagnosis in hyperkeratotic papular forms is condyloma acuminata. Dermoscopy is an essential tool for diagnosis. Lymphatic malformations are composed of vesicles with translucent, hemorrhagic, or yellowish content separated by whitish septa. Note that, if lymphangioma is completely hemorrhagic, the dermoscopic appearance becomes indistinguishable from that of tuberous hemangioma, which is why it is important to search for a specific sign of lymphangioma, which is the Hypopyon-like appearance that corresponds to the precipitation of red blood cells at the bottom of vesicles.

The criteria for selecting a Klippel–Trénaunay syndrome are extensive cutaneous vascular malformation of a limb, congenital or acquired varicosities of the same limb, and tissue or bone hypertrophy of the same limb [3].

A Tunisian series on ninety-nine patients with venous malformation revealed the predominance of this type of malformation in females [4]. Cephalic localization was predominant in the Tunisian series and all patients benefited from ethibloc or alcohol sclerotherapy, while the patients in our series benefited from aetoxisclerol sclerotherapy due to its safety compared to alcohol. Skin necrosis occurred in nine Tunisian patients and one patient in our series.

To conclude, capillary malformations followed by venous malformations were the most frequent vascular malformations in our series. Capillary malformations are present from birth, unlike infantile hemangiomas, which are characterized by a free interval, and venous malformations appear during early childhood or adolescence and have a differential diagnosis with deep microcystic and macrocystic lymphatic malformations.

Statement of Human and Animal Rights

All the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the 2008 revision of the Declaration of Helsinki of 1975.

Statement of Informed Consent

Informed consent for participation in this study was obtained from all patients.

REFERENCES

1. Casanova D, Boon LM, Vikkula M. [Venous malformations: clinical characteristics and differential diagnosis]. Ann Chir Plast Esthet. 2006;51:373-87.
2. Ezzine Sebai N, Badri T, Daoud L, Zitouni K, Rajhi H, Fazaa B, et al. [Arteriovenous malformations: Study about 54 patients]. Tunis Med. 2007;85:871-3.
3. Alouani I, Bkiyar H, Dikhaye S, Housni B, Zizi N. Overlapping of Sturge–Weber syndrome and Klippel–Trenaunay syndrome: A new case report. Our Dermatol Online. 2018;9:101-2.
4. Ezzine Sebai N, Badri T, Rajhi H, Khaled A, Sioud A, Zitouni K, et al. Experience of a multidisciplinary committee in the management of superficial venous malformations: 99 cases. Tunis Med. 2009;87:283-4.

Source of Support: This article has no funding source.

Conflict of Interest: The authors have no conflict of interest to declare.