

## Cervicofacial Cystic Lymphangioma: About A Case Report

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### Abstract

### Case Report

Cystic lymphangioma is a congenital malformation of the lymphatic system, usually occurring before the age of one. We report a clinical observation of a cervico-facial cystic lymphangioma in a newborn.

**Keywords:** Cystic lymphangioma, malformation, children.

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## INTRODUCTION

Cystic lymphangioma is a benign tumor caused by dysembryoplasia of the lymphatic system. It can be potentially serious because of its tendency to spread and infiltrate neighboring tissues, and because of its acute complications, usually occurring before the age of one. Its primary location in the cervicofacial region remains rare.

## OBSERVATION

Newborn at 3<sup>rd</sup> day of life, carried to term, with no particular history consulted for bilateral cervico facial swelling since birth with refusal of suckling.

Physical examination revealed a parotid swelling on the right, 40 mm and on the left, 35 mm long axis, well limited, depressible, soft, mobile, painless and covered with healthy skin (Figure 1).

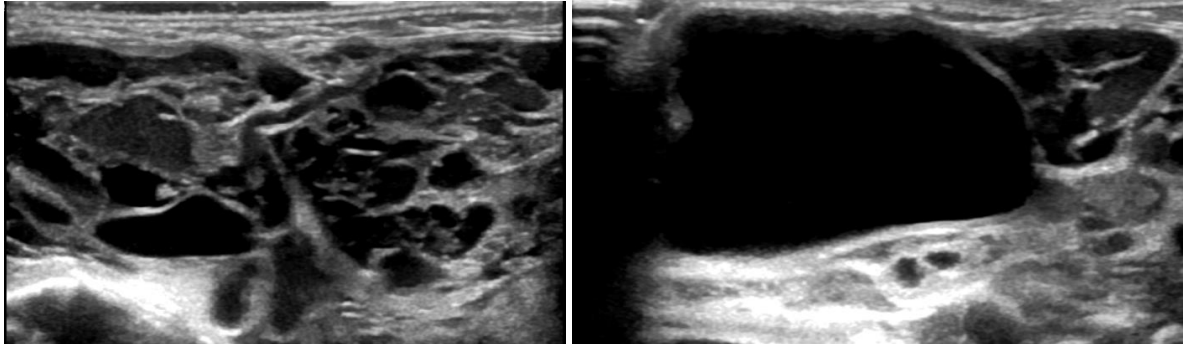


**Figure 1: Swelling in the parotid and laterocervical region bilaterally**

**His biology** showed no inflammatory syndrome.

**Cervical ultrasonography** revealed a voluminous formation centred on the bilateral parotid region and extending laterally into the cervix. It was

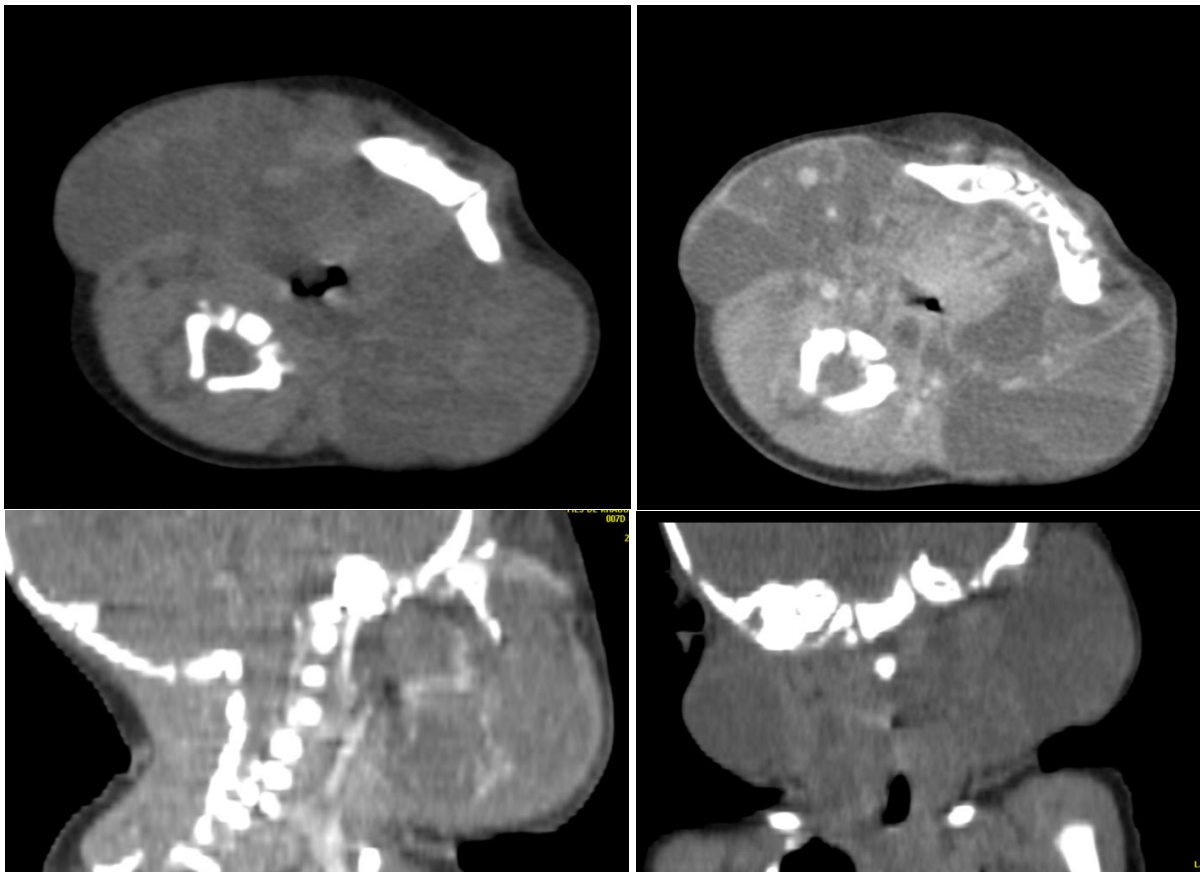
multiloculated and widely cystized, with thick and thin partitions insinuating themselves into the peripherally vascularized soft tissues of the neck, measuring 175 x 65 mm (Figure 2 & 3).



**Figure 2 & 3: Voluminous lesion formation centered on the parotid region extended into bilateral basi cervical compressive**

**Cervical CT scan (Figure 4)** revealed voluminous bilateral cervico-parotid cystic formations extending basi-cervically, of liquid density not taking up

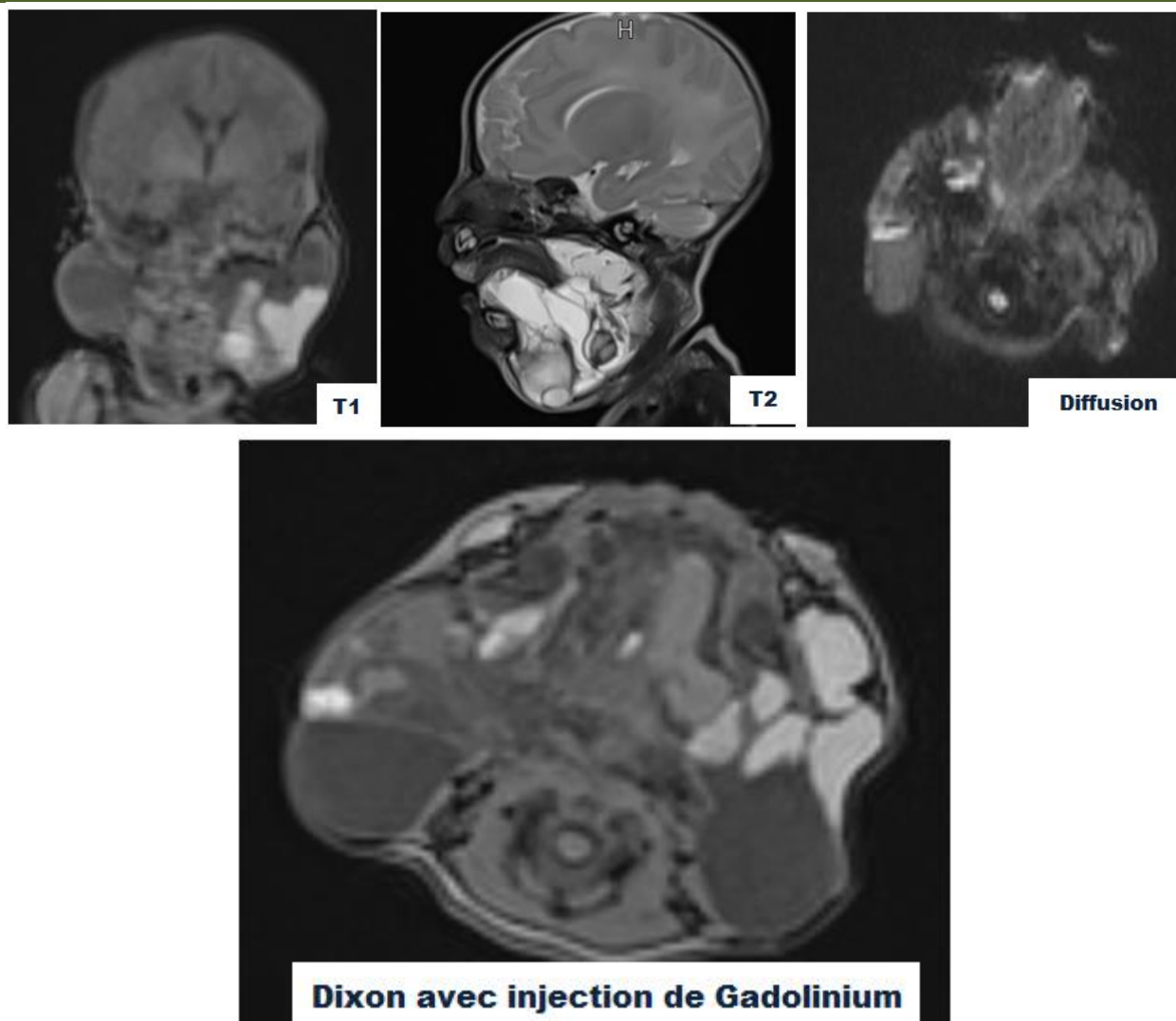
contrast medium, with multiple partitions enhanced after injection of contrast medium, compressive.



**Figure 4: Cervical CT axial slices, and sagittal and coronal reconstructions without and with PDC injection illustrating voluminous bilateral cervical-parotid cystic formation, multiloculated, extending to the basi cervical, seat of multiple partitions enhanced after PDC injection, compressing the aerodigestive axis**

**Cervical MRI (Figure 5)** confirmed the presence of a bilateral median and latero-cervical multiloculated cystic cervical-facial formation with a

liquid signal compressing the aerodigestive axis and filling the deep spaces.



**Figure 5: Cervical MRI illustrating a voluminous multiloculated medial and latero-cervical cystic formation with a T1 hypointense, T2 hyperintense liquid signal, a T1 hyperhemorrhagic signal and a diffusion hyperintense, with parietal and septal enhancement after injection of Gadolinium.**

## DISCUSSION

Cystic lymphangioma is a rare congenital malformation of the lymphatic system, representing 5% of vascular anomalies and 6% of benign tumors in children [1].

These lesions predominate in the head and neck region, particularly in the posterior cervical triangle [5].

Three types of lymphangioma can be distinguished; capillary lymphangiomas comprising small vessels with narrow lumens, cavernous lymphangiomas with dilated, anfractuous and intercommunicating lumens and cystic lymphangiomas or cystic hygroma presenting large confluent cavities filled with clear yellow fluid [6].

Cervical ultrasound is the first-line examination, with Doppler examination showing no flow within the malformation. The lesion is well-limited,

anechoic, formed of multiple logettes separated by very fine fibrous septa [8].

Computed tomography is helpful in the pre-therapeutic assessment, showing hypodense with low fluid density (10-36 HU). Macrocystic lesions are of homogeneous density, close to that of water, and partitions are sometimes only revealed after injection of contrast medium. MRI remains the best examination for assessing lesion extension, delineating tumor contours and invasion of neighboring organs, and showing a hypointense T1, hyperintense T2 fluid signal from the mass, with little or no parietal and septal enhancement [7]. Intracystic hemorrhage is reflected by a hyper signal on the T1-weighted sequence.

Puncture takes its place in the case of an extensive compressive lymphangioma.

Lymphangioma removal surgery is the treatment of choice. It is indicated as first-line treatment in localized and diffuse macrocystic forms, and in microcystic forms. Ultimately, the treatment modality is chosen according to location, size, classification and parental preference [2].

Pathological examination confirms the diagnosis of cystic lymphangioma.

## CONCLUSION

Surgery remains the only treatment option for the removal and pathological confirmation of lymphangiomas, surgical intervention represents the treatment of choice. Extending the lesion and affecting vital structures can reduce the effectiveness of treatment.

## REFERENCES

1. Khamassi, K., & Mahfoudhi, M. (2015). Cystic lymphangioma of the parotid gland. *The Pan African Medical Journal*, 20, 443-443.
2. Hamidi, O., El Azzouzi, R., & Boulaadas, M. 'Le lymphangiome kystique cervico parotidien : approche thérapeutique et pronostic: expérience de service'.
3. Bentebbiche, T., Daoud, F., Bencheikh, M., & Rous, I. (2020). Les lymphangiomes kystiques cervico-faciaux étude rétrospective sur une série de 16 cas. *Journal de la faculté de médecine de Blida*, 09-11.
4. Adjar, H. (2011). Lymphangiome kystique chez l'enfant (A propos de 11 cas). Thèse de médecine N° 024. Faculté de médecine et de pharmacie Fès.
5. Mukakala, A. K., Banza, M. I., Musapudi, E. M., Lubosha, N. A., Kasanga, T. K., Nafatalewa, D. K., ... & Mwenibamba, R. M. (2020). Lymphangiome kystique du cou chez un adulte jeune: à propos d'un cas et revue de la littérature. *Pan African Medical Journal*, 36(1), 54.
6. Handa, R., Kale, R., & Upadhyay, K. K. (2004). Lymphangiome médiastinal isolé herniant à travers l'espace intercostal. *Journal asiatique de chirurgie*, 27, 241-242.
7. Poyraz, A. S., Kilic, D., Hatipoglu, A., Ozulku, M., Sar, A., & Bilezikci, B. (2004). Cystic lymphangioma confined to mediastinum in an adult. *The Japanese Journal of Thoracic and Cardiovascular Surgery*, 52, 567-569.
8. Adjar, H. (2011). Lymphangiome kystique chez l'enfant (À propos de 11 cas). Université Sidi Mohammed Ben Abdellah faculté de médecine et de pharmacie Fès.