as well as intrallesional hyperechogenic dots without posterior acoustic shadowing that correlated with calcifications on histology. Kitamura et al.3 previously described a case of SH with diffusely distributed intrallesional hyperechogenic dots, some of which presented posterior acoustic shadowing, corresponding to calcifications on histology. These calcifications had been described earlier by Nakamura and Miyachi.3 Those authors proposed a relationship between the presence of calcifications and time since lesion appearance and low intrallesional flow, in agreement with the characteristics of the first case described here. In the second and third cases color Doppler mode revealed intrallesional vascularization, a rare finding in these lesions6,7 that histologically corresponds to vascular lumina. No calcifications were observed on histology and hyperechogenic dots were absent on ultrasound.

In conclusion, we present 3 cases of SH and describe the corresponding ultrasound and histological findings. In 2 of the 3 cases we observed marked intrallesional vascularization, an uncommon feature in this type of lesion. Although ultrasound allows assessment of lesion vascularization and the relationship with adjacent structures, there are no distinctive ultrasound findings that enable diagnosis, which is fundamentally based on histological findings.

Conflicts of interest

The authors declare that they have no conflicts of interest.

References


C. García-Harana, a, b I. Fernández-Canedo, a S. Rodríguez-Lobalzo, b J.B. Repiso Jiménez a

a Servicio de Dermatología, Hospital Costa del Sol, Marbella, Málaga, Spain
b Servicio de Anatomía Patológica, Hospital Costa del Sol, Marbella, Málaga, Spain

a Corresponding author.
To the Editor: E-mail address: cristina.garciaharana@gmail.com (C. García-Harana).

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Subcutaneous Neck Lesion After Chiropractic Manipulation: The Role of Ultrasound Skin Imaging

Lesión subcutánea cervical tras manipulación quiropráctica: papel de la ecografía cutánea

To the Editor:

Subcutaneous lesions often raise diagnostic doubts in the dermatological consultation and require a more specific approach. We describe a case in which skin ultrasound played a fundamental role in the diagnosis and management of a patient with a neck tumor.

The patient was a 20-year-old woman with no personal medical history of interest who was seen for a progressively growing tumor in the left cervical region that had appeared suddenly 1 week earlier, causing mild pain in the immediate area of the lesion. Physical examination revealed a subcutaneous lesion (3 × 2 cm) with a gummy consistency, with no alteration in surface coloration and no epidermal involvement (Fig. 1).

The differential diagnosis included adenopathies, lipoma, intramuscular hematoma, and other subcutaneous tumors.

Given the diagnostic doubt, the patient underwent skin ultrasound with a 15–18–MHz linear probe (Esaote MyLab), which revealed the presence beneath the sternocleidomastoid muscle of a hypoechoic, oval structure (2.8 × 1.5 × 1.4 cm) with well-defined margins and a major axis in the longitudinal direction. Color Doppler mode showed an absence of intrallesional vascularization and the presence of peripheral vascularization (Figs. 2 and 3). The ultrasound findings were compatible with an intramuscular hematoma.

In light of the ultrasound findings, we further investigated the medical history of the patient, who reported that she had visited a chiropractor 2 weeks earlier.

Ultrasound examination of the path of the carotid artery showed no abnormalities. Cervical computed tomography

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Cervical hematoma after chiropractic manipulation is an uncommon complication, but can be indicative of a major vascular complication. Indeed, there are multiple reports of dissection of the vertebral or carotid artery (pseudocoarctation or intramural hematoma) in this context. Assessment with imaging tests, analysis of risk factors (e.g., smoking, contraception), and study of the underlying disease (vasculitis, fibromuscular dysplasia, Ehler-Danlos syndrome, Marfan syndrome) is therefore mandatory in patients with cervical hematoma associated with major vascular complication.

In the present case, the ultrasound differential diagnosis included lipoma, lymphadenopathy, and thrombosis. Lipomas show variable echogenicity and in some cases a characteristic hyperechogenic band. They tend to be located in the subcutaneous cellular tissue and have poorly defined margins. Lymphadenopathy is usually characterized by oval morphology with a hyperechoic center and a peripheral hypoechogenic halo. In the presence of inflammation an increase in volume and vascularization may be observed, although the general morphological and structural ultrasound features are retained. Thrombosis lesions are usually hyperechogenic, are located inside the vessels, and may present peripheral vascularization (recanalization). On ultrasound hematoma appears as a hypoechoic or anechoic structure, with no internal blood flow, although Doppler mode reveals peripheral vascularization, as occurred in the present case.

Skin ultrasound is particularly useful in the diagnosis and monitoring of a wide variety of dermatological and non-dermatological conditions. This may explain the exponential increase in recent years in the use of this technique, which has been incorporated into dermatology consultations.

In conclusion, we present the case of a young patient with a cervical hematoma resulting from chiropractic manipulation, and emphasize the importance of considering additional tests given the possibility of associated cervical vessel involvement. Moreover, we wish to highlight the role of skin ultrasound in the diagnosis and management of this case, which could have involved more serious complications.
Conflicts of interest

The authors declare that they have no conflicts of interest.

References

8. C. Durán Vian, a, b I. Salgüero Fernández, b F. Alfageme Roldán, a G. Roustán Gullón b
a Servicio de Dermatología, Hospital Universitario Marqués de Valdecilla, Santander, Spain
b Servicio de Dermatología, Hospital Universitario Puerta de Hierro Majadahonda, Madrid, Spain
*Corresponding author. E-mail address: cdurvanvian@gmail.com (C. Durán Vian).

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**Papular Epidermal Nevus With “Skyline” Basal Cell Layer: A Report of 3 New Cases**

Papular epidermal nevus with “skyline” basa...