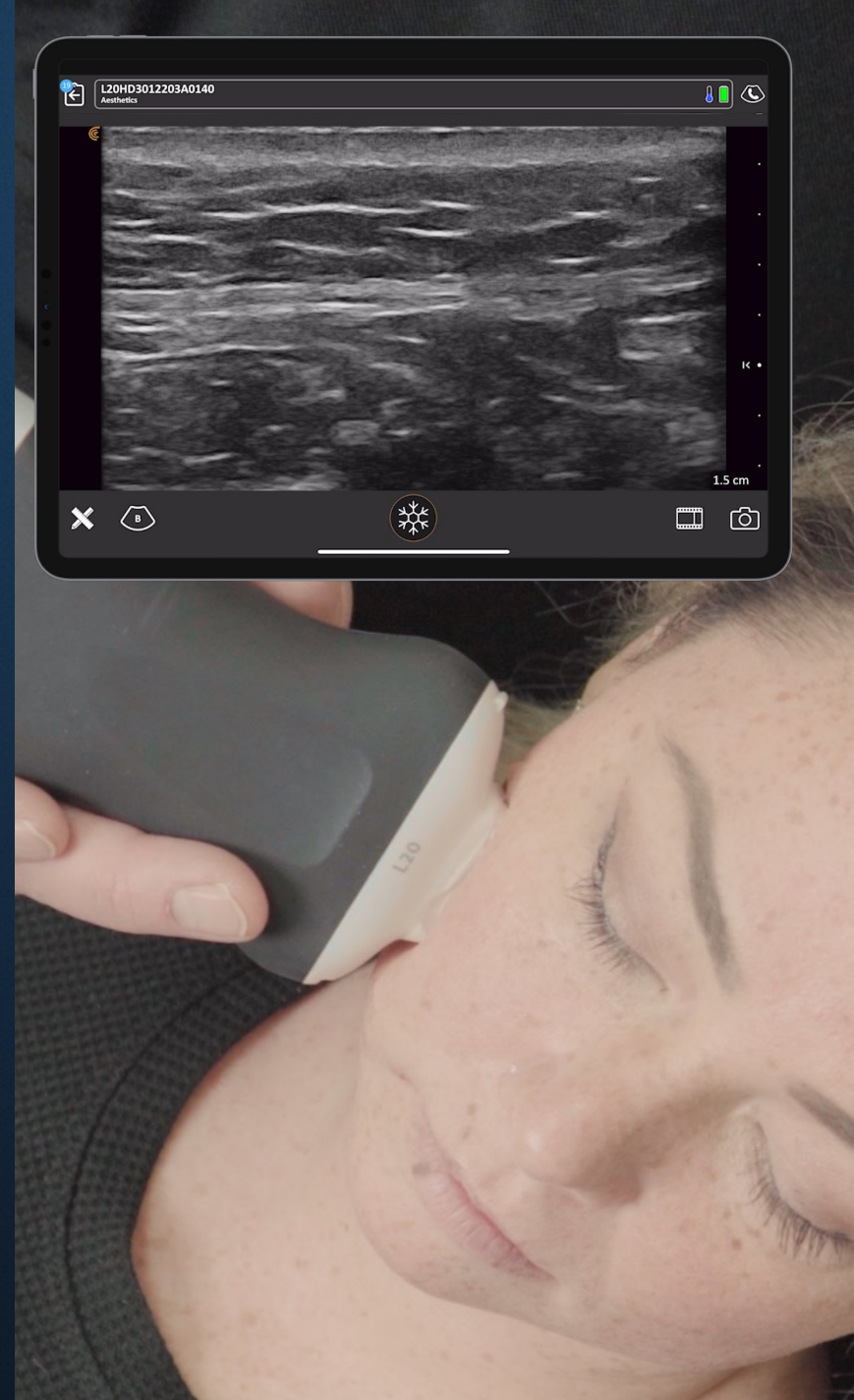




WEBINAR

Ultrasound for Safe Jawline Rejuvenation: Visualizing Anatomy, Guiding Filler Injections, and Resolving Complications

September 2023



The World's Only 20 MHz Handheld

“

The **minimum transducer frequency** for dermatologic ultrasound should be **15 MHz**. Higher transducer frequencies may provide further information that may be relevant (broad agreement 8/9, 88.9 %).

Siwetz M, Turnowsky N, Hammer N, Pretterklieber M, Wree A, Antipova V. A Rare Case of Facial Artery Branching-A Review of the Literature and a Case Report with Clinical Implications. *Medicina* (Kaunas). 2021 Oct 28;57(11):1172. doi: 10.3390/medicina57111172. PMID: 34833392; PMCID: PMC8625730.



Article published online: 2020-05-07

Guidelines & Recommendations

Thieme

European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB) Position Statement on Dermatologic Ultrasound Stellungnahme der European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB) zu Dermatologischem Ultraschall

Authors

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Key words

dermatologic ultrasound, guidelines and recommendations, skin ultrasound

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Bibliography

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ABSTRACT

Dermatologic ultrasound is a recent application of ultrasound for the evaluation of healthy skin and appendages and their diseases. Although the scientific literature regarding this application is still not sufficient for evidence-based guidelines, general recommendations issued by scientific societies are necessary. The EFSUMB (European Federation of Societies for Ultrasound in Medicine and Biology) steering committee for dermatologic ultrasound has developed a series of consensus position statements regarding the main fields of dermatologic ultrasound (technical requirement, normal skin and appendages, inflammatory skin diseases, tumoral skin diseases, aesthetic dermatology and practice-training requirements). This document is the foundation for future evidence-based recommendations and guidelines for dermatologic ultrasound practice.

ZUSAMMENFASSUNG

Dermatologischer Ultraschall ist eine neuere sonografische Anwendung zur Beurteilung gesunder Haut, ihrer Adnexe und deren Erkrankungen. Obwohl die wissenschaftliche Literatur zu dieser Anwendung noch nicht für evidenzbasierte Leitlinien ausreicht, sind allgemeine Empfehlungen der wissenschaftlichen Gesellschaften erforderlich. Der Lenkungsausschuss für dermatologischen Ultraschall der EFSUMB (European Federation of Societies for Ultrasound in Medicine and Biology) hat eine Reihe von Konsensus-Stellungnahmen zu den Hauptgebieten des dermatologischen Ultraschalls erarbeitet (technische Anforderungen, normale Haut und Adnexe, entzündliche Hauterkrankungen, Tumorerkrankungen der Haut, ästhetische Dermatologie und Anforderungen an die praktische Ausbildung). Dieses Dokument bildet die Grundlage für zukünftige evidenzbasierte Empfehlungen und Leitlinien für die Praxis des dermatologischen Ultraschalls.

Your Host



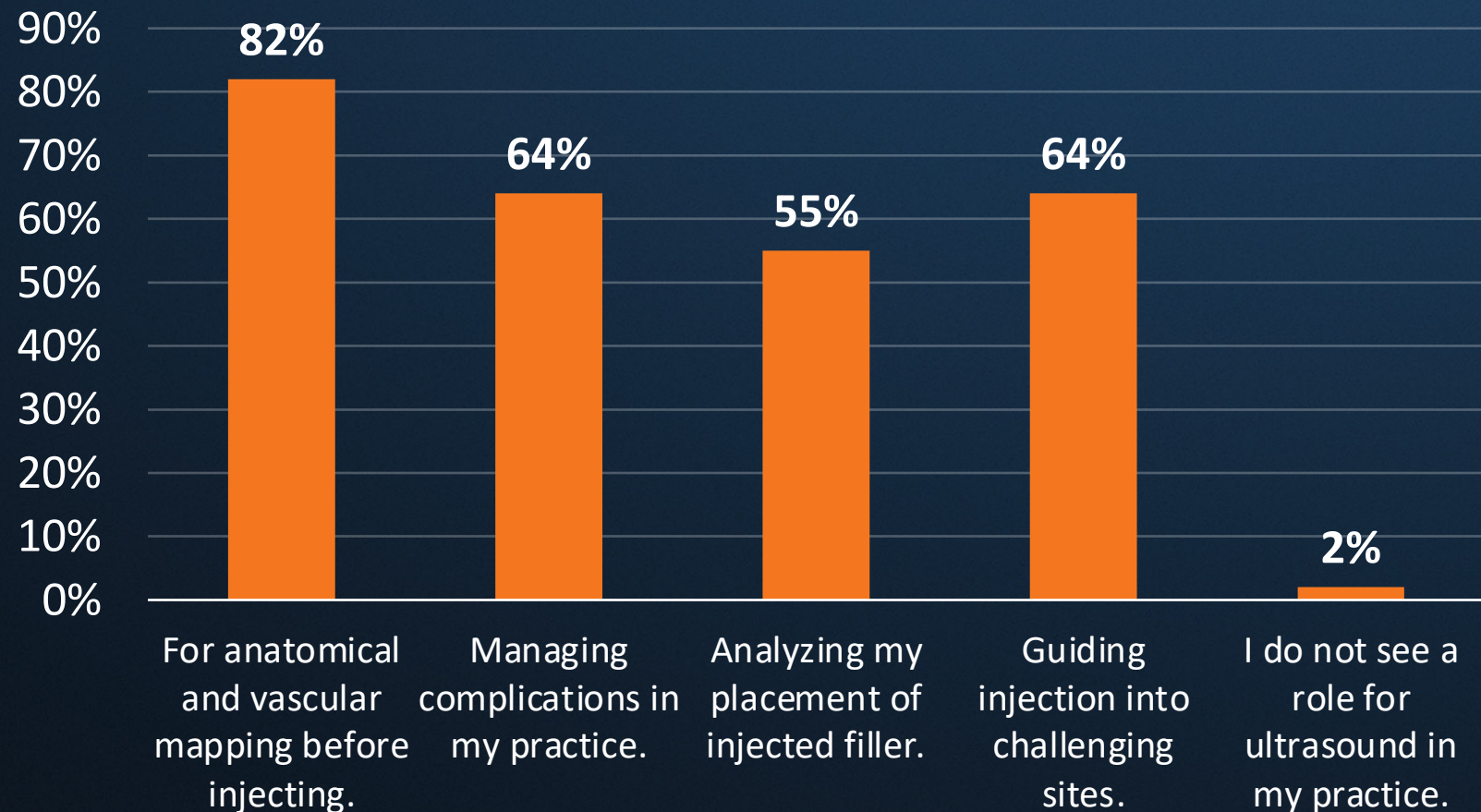
Dr. John Arlette

Dermatologist & Educator



Interactive Poll

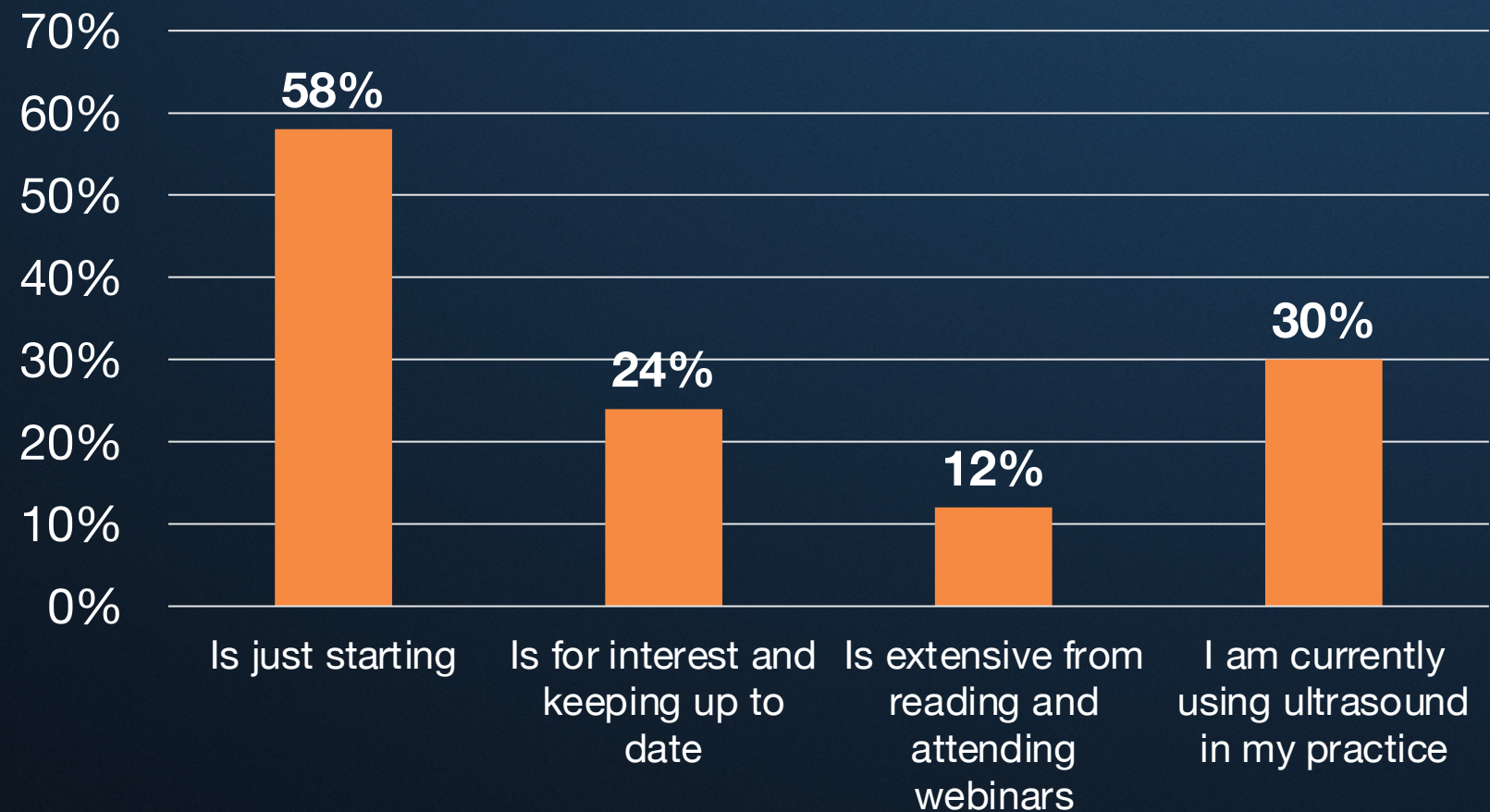
Where do you see using ultrasound in your injectable practice?





Interactive Poll

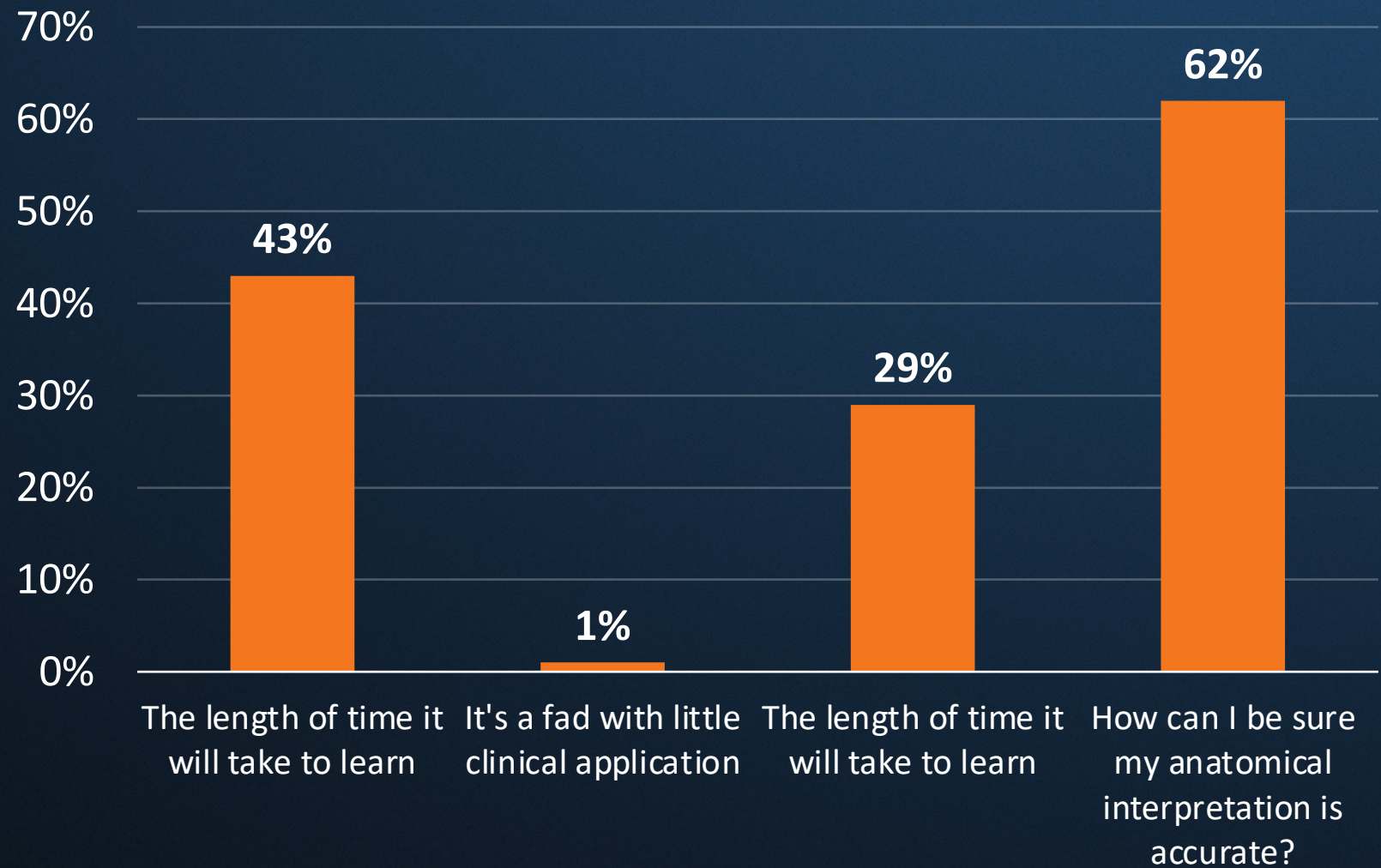
My understanding of ultrasound for injectable therapy.





Interactive Poll

My biggest concern about practice is

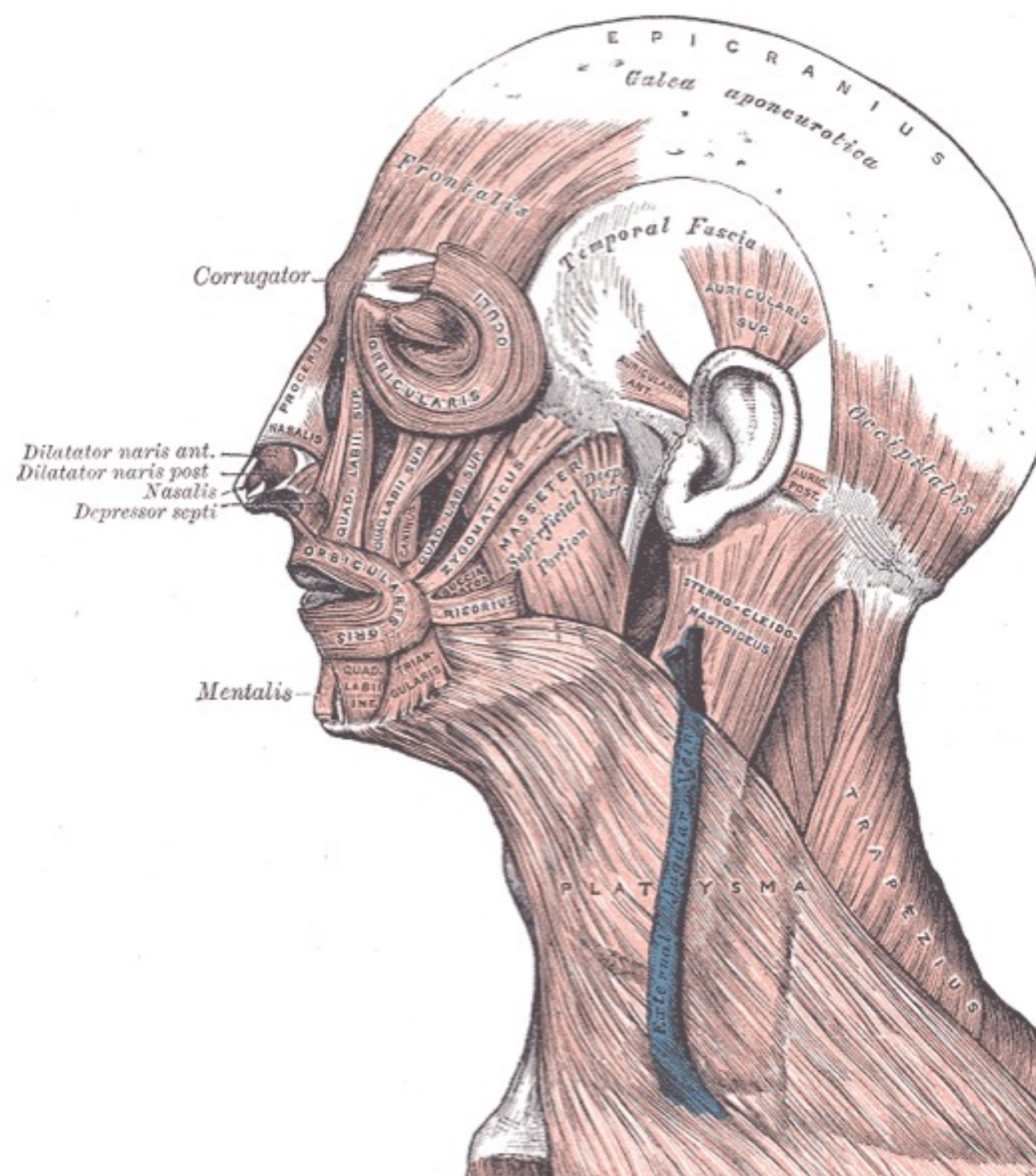


Outline

- Anatomy of the jawline
- What is re-draping of the jawline?
- Complications
- Treatment

Anatomy

Muscles

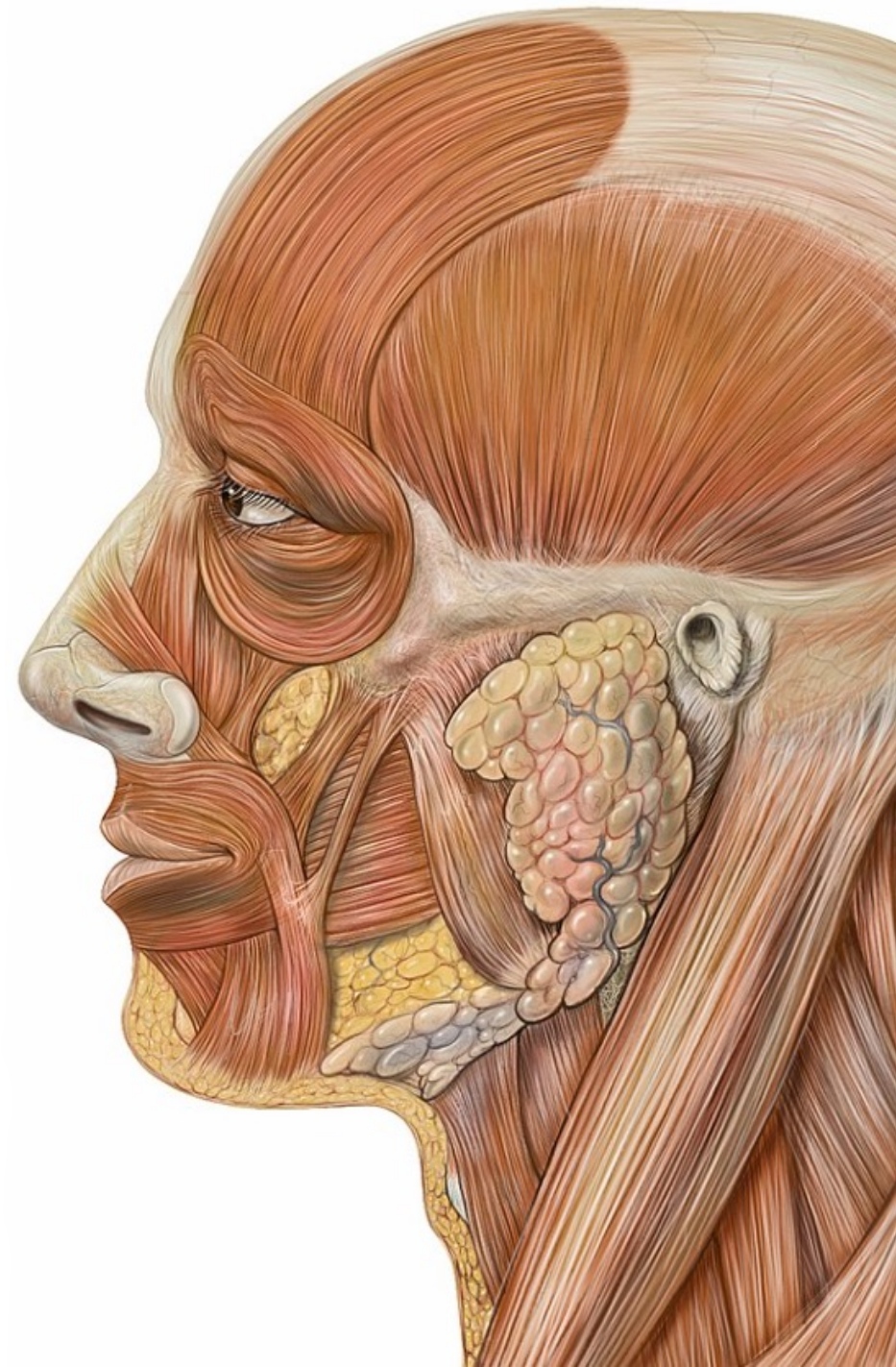




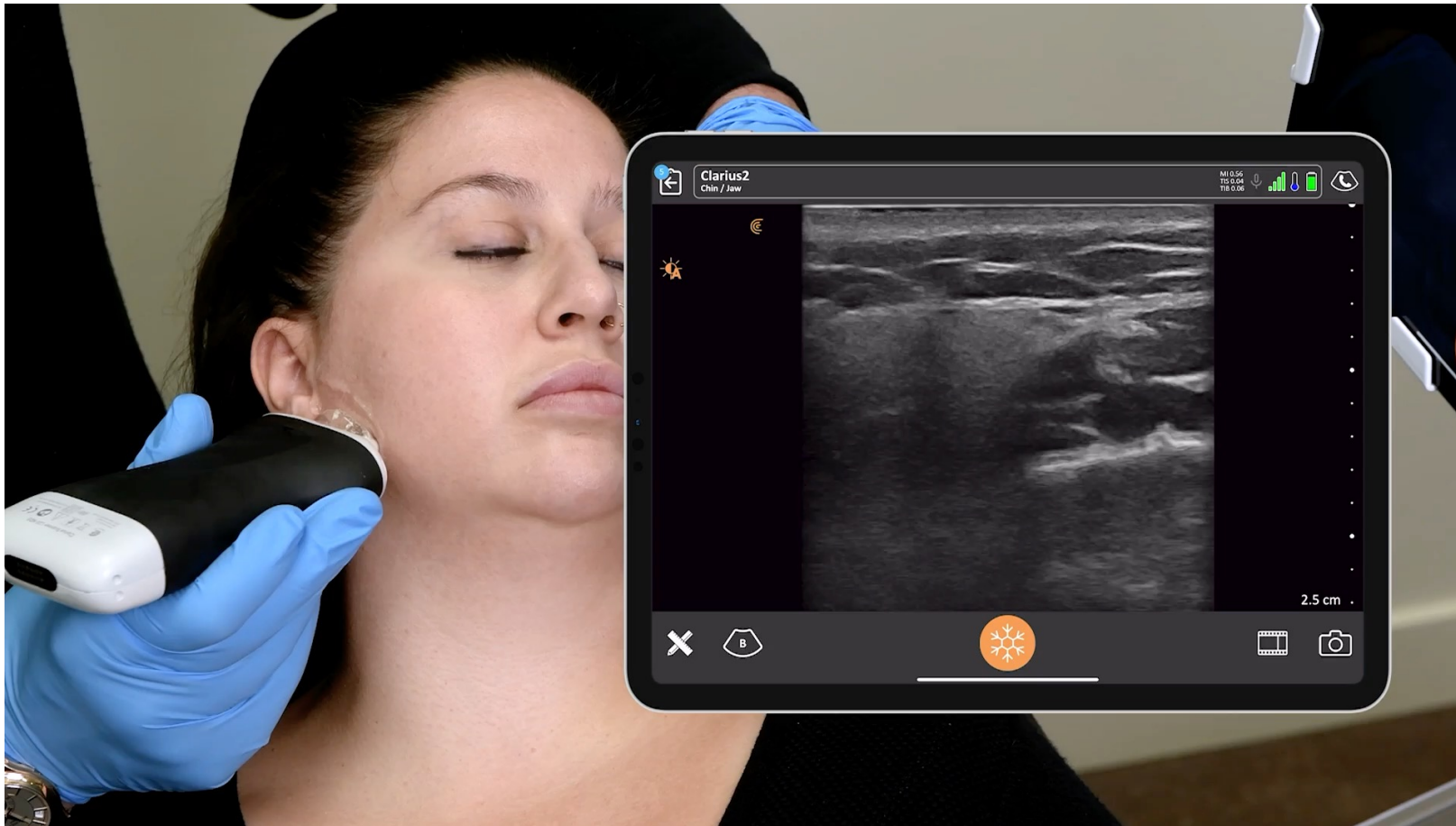
Vascular Structures

Anatomy

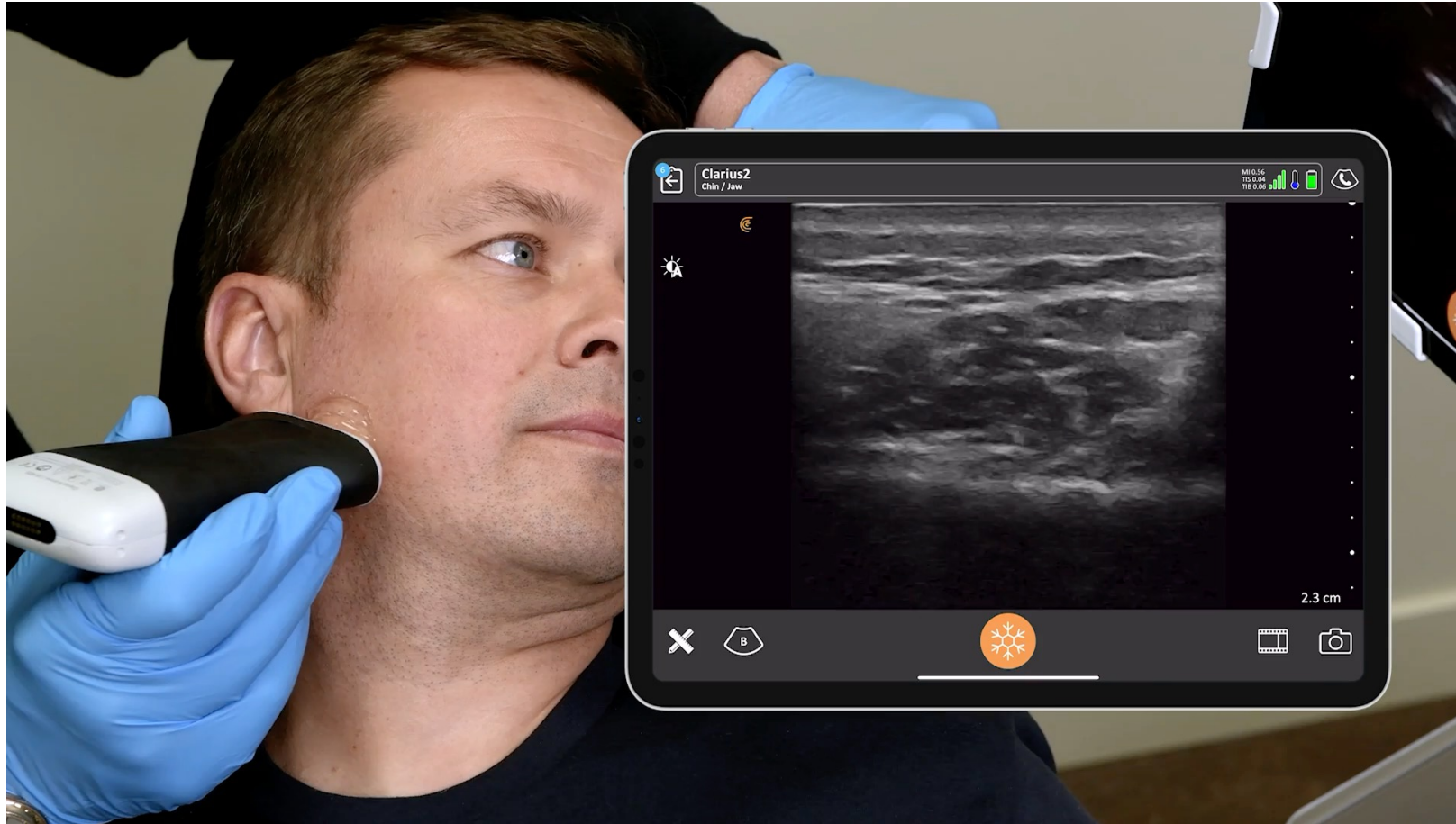
The Parotid Gland



Ultrasound of the Jawline



Ultrasound of the Jawline



What is Jawline Re-Draping?

- Dermal Fillers
- Injectable Neurotoxins
- Facial Contouring



Dermal Filler Techniques



Ultrasound Appearance of Filler After Injections

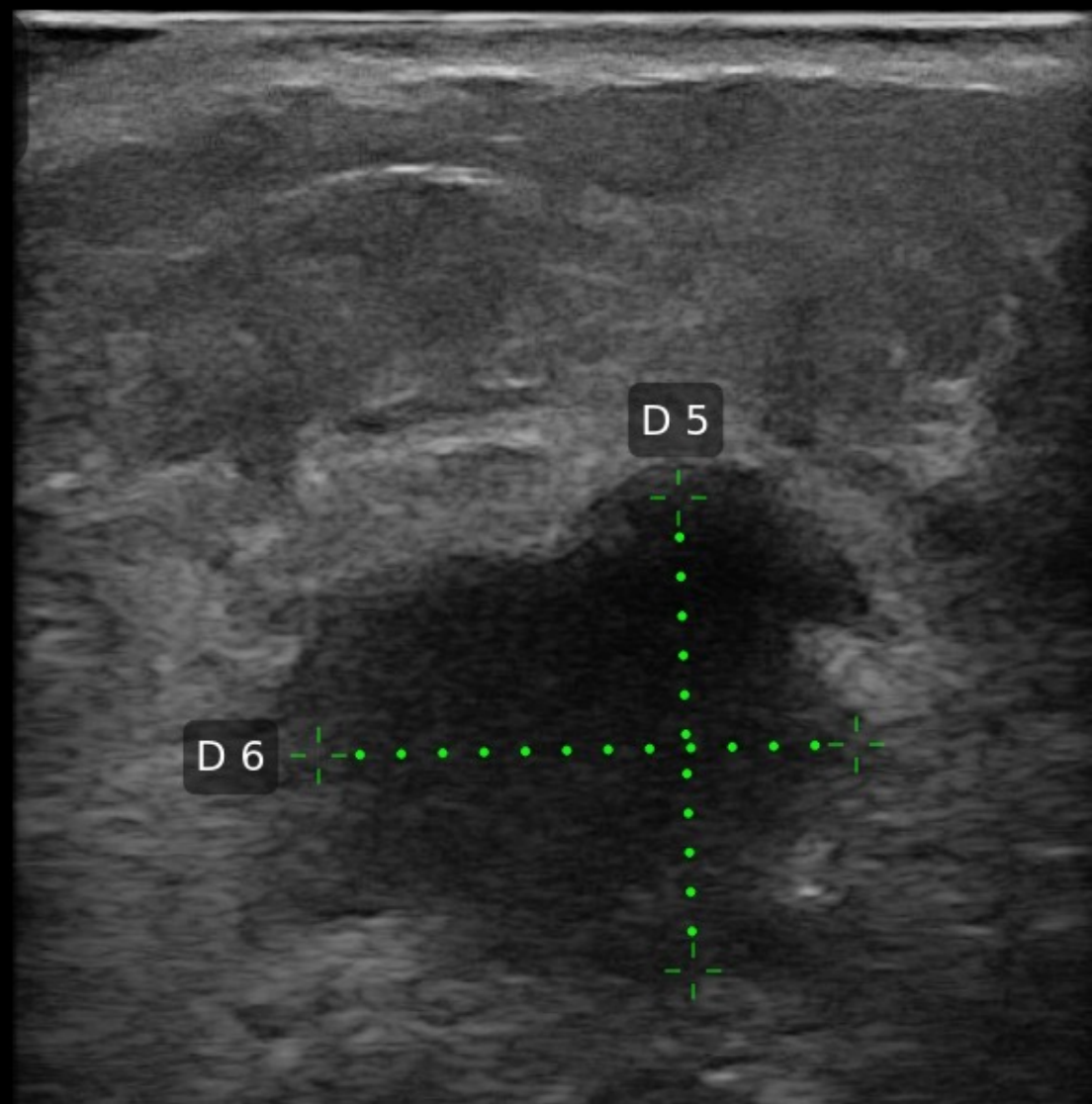


Complications

- Parotid
- Masseter



D 5 10.77 mm
D 6 12.25 mm

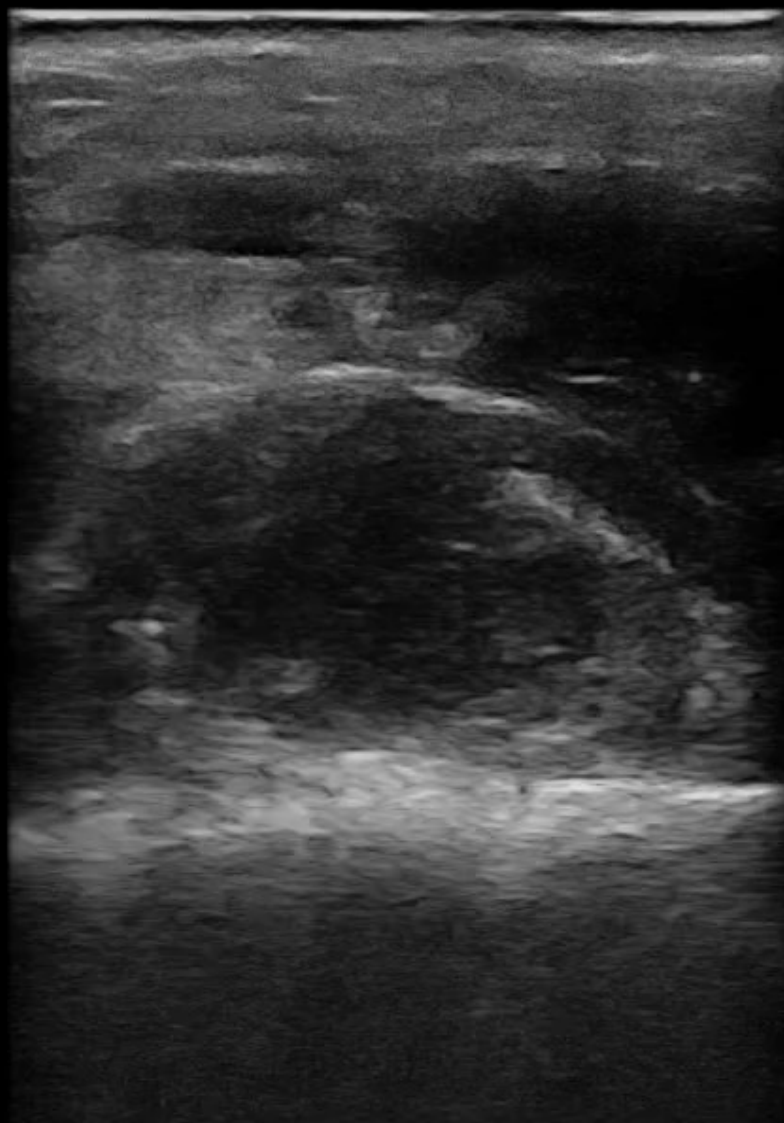


2.5 cm

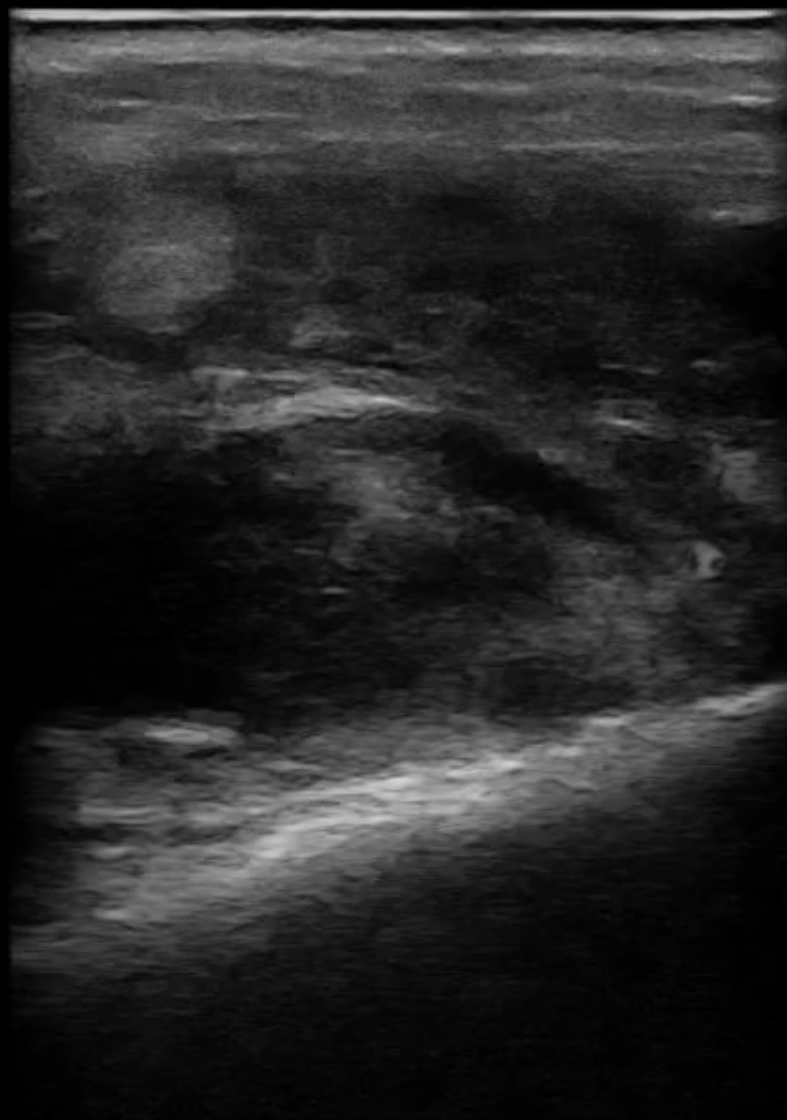


Parotid Complications

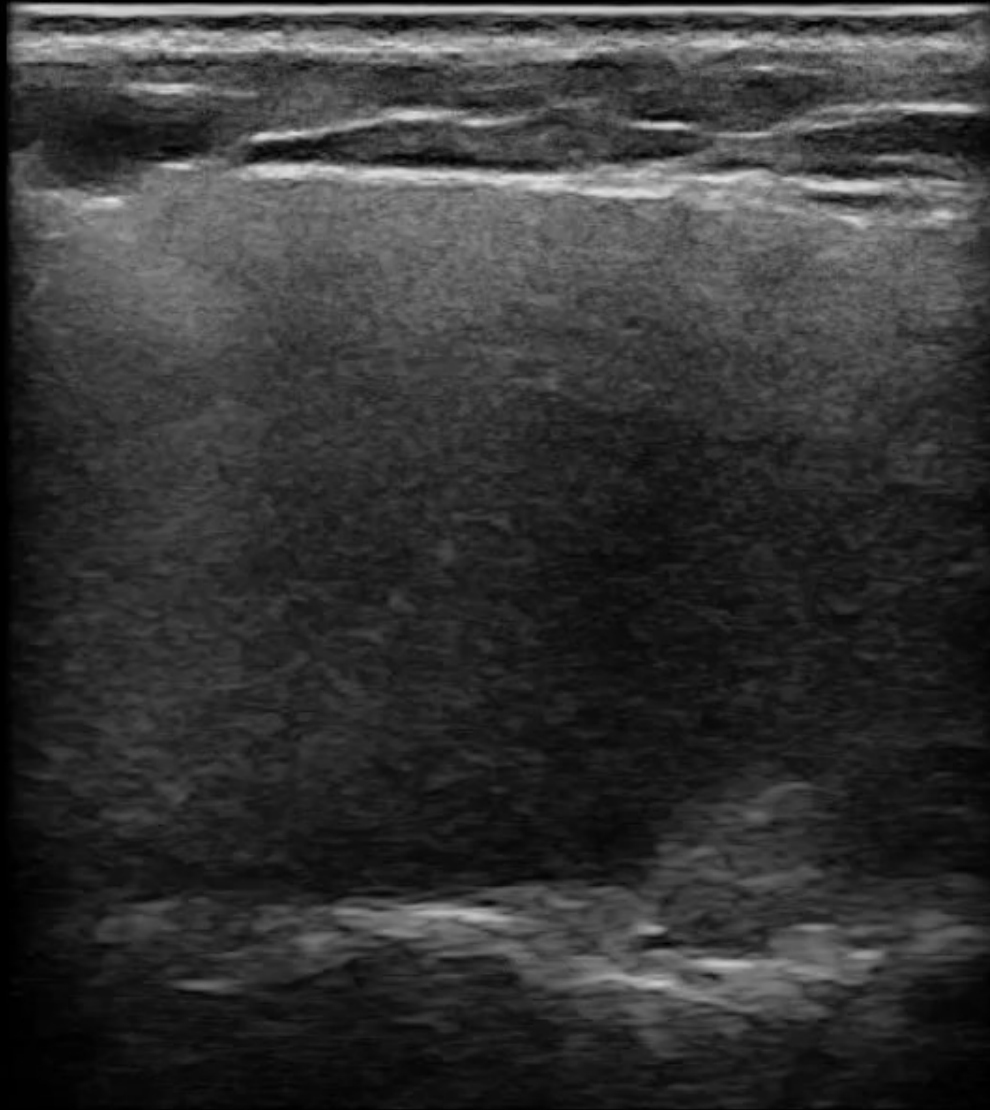




3.5 cm



3.5 cm



2.8 cm

Complication: Masseter Nodule



Complication: Masseter Nodule



Complication: Masseter Nodule



Summary

Use ultrasound to get to know each patient's unique anatomy and plan your injection sites

Ultrasound can be used to characterize filler complications

Ultrasound is extremely valuable for guiding treatment



John Arlette - Facilitator

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 [@john.arlette](https://www.instagram.com/john.arlette)

www.cosmeticultrasoundtraining.com



Live Demonstration



Shelley Guenther, CRGS, CRCS

Sonographer | Clinical Marketing Manager



What additional
information would
you like?

Interactive Poll

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Ranked Best in Image Quality for Handhelds


“In terms of overall image quality, the L20 received the highest mean rating, followed by the L15 ...

Table 1. Device rankings by image quality scores.

	Filler image quality ranking*	Mean score* (n=7)	Artery image quality ranking*	Mean score* (n=8)	Orbital image quality ranking*	Mean score* (n=4)	Overall image quality ranking*	Mean score* (n=19)
1	Clarius L20	3.79	Clarius L20	2.79	Clarius L20	2.83	Clarius L20	3.15
2	Clarius L15	3.32	GE Vscan Air	1.88	GE Vscan Air	2.50	Clarius L15	2.24
3	GE Vscan Air	2.21	Butterfly IQ+	1.79	Philips Lumify (tie)	2.08	GE Vscan Air	2.13
4	Butterfly IQ+	2.05	Philips Lumify (tie)	1.46	Clarius L15 (tie)	2.08	Butterfly IQ+	1.87
5	Philips Lumify	1.68	Clarius L15 (tie)	1.46	Butterfly IQ+	1.75	Philips Lumify	1.67

Park KE, Mehta P, Tran C, Parikh AO, Zhou Q, Zhang-Nunes S. A comparison of five point-of-care ultrasound devices for use in ophthalmology and facial aesthetics. *Ultrasound*. 2023;0(0). doi:10.1177/17422271X231166895 Source: <https://journals.sagepub.com/doi/abs/10.1177/17422271X231166895?journalCode=ultb>

A comparison of five point-of-care ultrasound devices for use in ophthalmology and facial aesthetics

Kristen E Park¹, Preeya Mehta¹, Charlene Tran², Alomi O Parikh², Qifa Zhou^{2,3} and Sandy Zhang-Nunes² 

Abstract

Introduction: Point-of-care ultrasound is becoming increasingly popular, and we sought to examine its role in evaluating ocular and periocular structures and facial vasculature. With the large number of point-of-care ultrasound devices available, it is difficult to determine which devices may be best suited for ophthalmic and facial aesthetic applications. This study compares five popular handheld point-of-care ultrasound devices to help guide clinicians in choosing the device best suited for their needs.

Methods: We compared five point-of-care ultrasound devices: Butterfly IQ+ (Butterfly, Burlington, MA), L15 (Clarius Mobile Health, Vancouver, British Columbia, Canada), L20 (Clarius Mobile Health, Vancouver, British Columbia, Canada), Lumify (Philips, Amsterdam, Netherlands) and Vscan Air (GE, Boston, MA). Three ophthalmologists obtained the following views on three volunteers: eight arteries, four ocular and periocular structures and areas of filler injections. The image quality of each view was graded on a four-point Likert-type scale. In addition, graders filled out a survey. The data were analysed using analysis of variance tests with the significance level set to $p < 0.05$.

Results: In terms of overall image quality, the L20 received the highest mean rating, followed by the L15, Vscan Air, Butterfly IQ+ and the Lumify ($p < 0.05$). With further stratification for structure type, the L20 was ranked first for filler, artery and orbital imaging ($p < 0.05$).

Conclusions: The L20 received the highest image quality rankings. While image quality is an important aspect of point-of-care ultrasound device selection, other factors such as cost, wireless capabilities, range of presets and battery life should also be considered.

Keywords

Handheld ultrasound, point-of-care ultrasound, ultrasound-guided filler injection, Butterfly IQ+, Clarius, Vscan Air, Lumify

Received: 13 December 2022; accepted: 6 March 2023

Introduction

Point-of-care ultrasound (POCUS) devices have become increasingly popular in a wide range of healthcare specialties in recent years. Their portability, accessibility and lack of radiation have made them especially attractive among available imaging modalities.

In the field of ophthalmology, ultrasound is useful for a variety of applications, including A-scans, B-scans and ultrasound biomicroscopy (UBM) to evaluate for intraocular pathologies such as retinal detachments, tumours, vitreous inflammation, intraocular foreign bodies and extraocular

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Questions



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Thank you!