

Short Communication

Update on the ultrasonographical appearance of *Dux Magnus Gentis Venteris Saginati*, colloquially known as ‘haggis’.

Sarah Keir^{1*}

¹ VetArtis, www.vetartis.co.uk

*Corresponding author sarah@vetartis.co.uk

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Abstract

This short communication is a brief look at previous research into the ultrasonographical appearance of *Dux Magnus Gentis Venteris Saginati*, colloquially known as ‘haggis’, with a study using updated techniques and equipment to scan these elusive beasties. Ultrasonography of haggii is still as limited as the description in the original paper, over 20 years ago. However, this new study did manage to achieve a greater depth of penetration and is the first to describe the internal, shallow structure of the haggis, with comparison between three subspecies.

Keywords: Haggis, Burns’ night, ultrasound

Introduction

The *Dux Magnus Gentis Venteris Saginati*, colloquially known as the ‘haggis’ and plural ‘haggii’, is a common feature of meals on Burns’ night, the 25th January, celebrated annually throughout the world. A previous paper published in 2002¹ (Dickie et al, 2002) and republished in 2007² (Dickie et al, 2007), was the first published report of ultrasonography being used in the management of reproduction in the haggis. However, the only confirmed fact within this paper, and corroborated by the authors, was the comment that “haggis contains too much fat and air for ultrasound to penetrate at diagnostic ranges”¹. However, ultrasound machines have moved on greatly in technical aspects and image resolution since the original publication in 2002 and therefore I was inspired to try to scan a haggis with a modern ultrasound machine.

Methods and materials

Due to the rare nature and shyness of the wild haggis, pre-deceased and packaged specimens were obtained from a distributor for ethically-culled haggii. Three different sub-species of the haggis were scanned, identified using the markings on the pelt, named ‘Macauleys’, ‘Macswreens’ and ‘Halls’. The scans were performed in sagittal and

¹ This suggests a follow-on study on the apparently similar composition of certain recent politicians. As with the haggii, they can also appear to be exceptionally dense.

longitudinal planes and a representative image of each was saved. The machine used for this study was an Easote MyLabOmega™ with linear transducer (model L4-15).

Results

On scanning a haggis, it was quickly discovered that the ultrasound beam had to be set to a lower range of frequency than the maximum the probe could achieve to give penetration to the beam. All three haggii sub-species scanned showed marked attenuation of the ultrasound beam due to the marbling of fat through the tissues. This obstructed the visibility of the internal organs and tissues of the haggii. The penetration was greatest for the subspecies 'Macauleys' (Figure 1), with tissue visible to a depth of about 1cm but only half of this in the other subspecies. The tissue was markedly heterogenous with highly reflective hyperechoic pockets throughout with shadowing deep to them – this is suggested to be gas within the tissue of the haggis. The tissue around these reflective areas was of mid-echogenicity and mottled pattern, with the subspecies 'Macauleys' showing the greatest heterogenicity. Representative images from subspecies 'Macswreens' (Figure 2) and 'Halls' (Figure 3) are also shown for comparison.

Discussion

The marbling of fat and gas through the tissues of the haggii caused high levels of attenuation of the ultrasound beam and restricted any viewing of deeper organs and tissues beyond the immediate subcutaneous layer. There are numerous reports of haggii containing lung, liver and heart but this cannot be verified sonographically. The previous published study on the ultrasound of haggii, suggested an intracorporeal route. This was not pursued in this study and could yield further diagnostic images for future studies. An unproven gustatory method may be tried in a subsequent study.

Due to the high fat content of haggii, interest could be shown in developing the fat marbling and feeding of whisky to the growing haggii in order to create a wagyu-style haggis, which could be marketed as 'hagyu'.

The unusually dense subcutaneous fat layer may be an evolutionary response to the tenacity of the West Highland White Terrier, the most commonly-used hunters' assistant during the annual cull. The effectiveness of this layer may in future allow haggis cutaneous layers to be adapted into protective gauntlets for those vets attempting to perform dentistry on this species of dog.

Conflict of interest

The author confirms no financial or personal relationships that could inappropriately influence or bias the content of the paper, excepting the deliciousness of the cooked haggii which will be consumed on the 25th January 2024.

Ethical considerations

No haggii were harmed in the research for this communication as they were harvested as part of the annual cull, used as population control.

References

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3. <https://www.scottishpoetrylibrary.org.uk/poem/address-haggis/> Accessed 25th January 2024

Figure 1 – Ultrasonographic appearance of subspecies of haggis ‘Macauleys’.

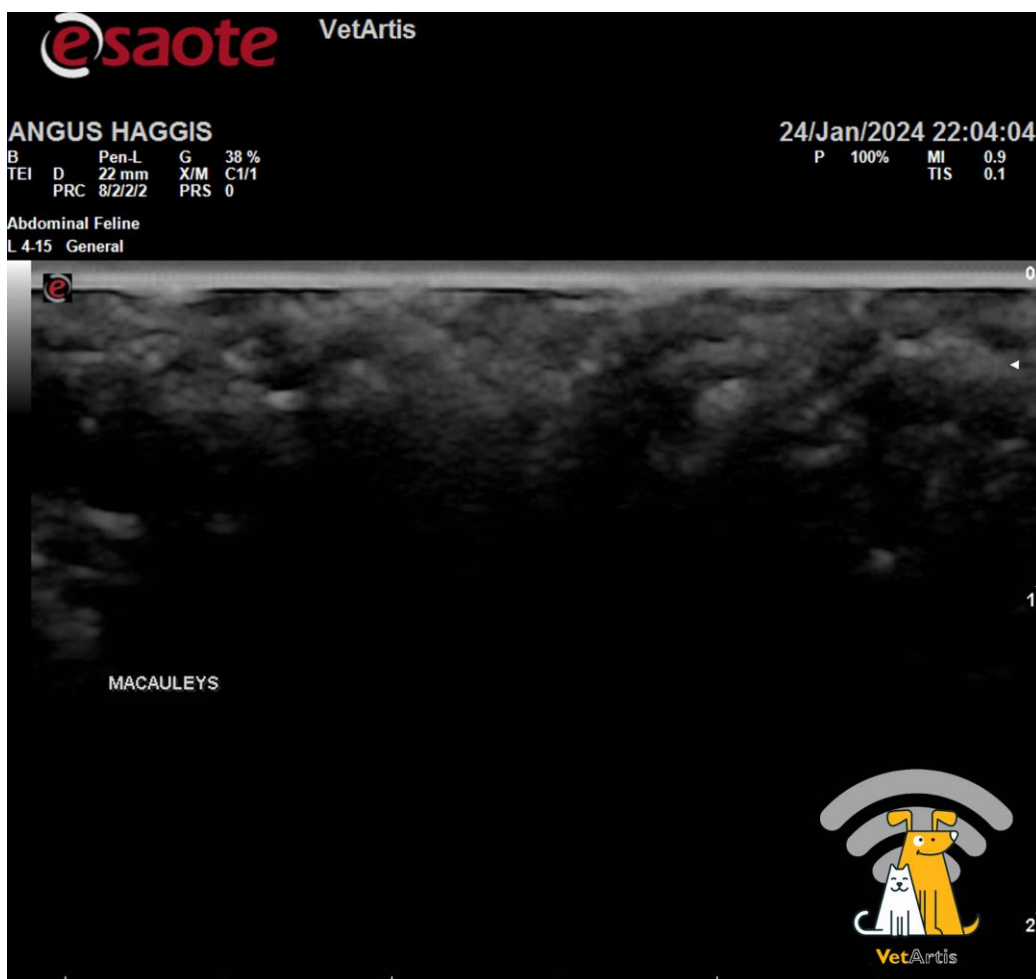


Figure 2 – Ultrasonographic appearance of subspecies of haggis ‘Macsweens’.

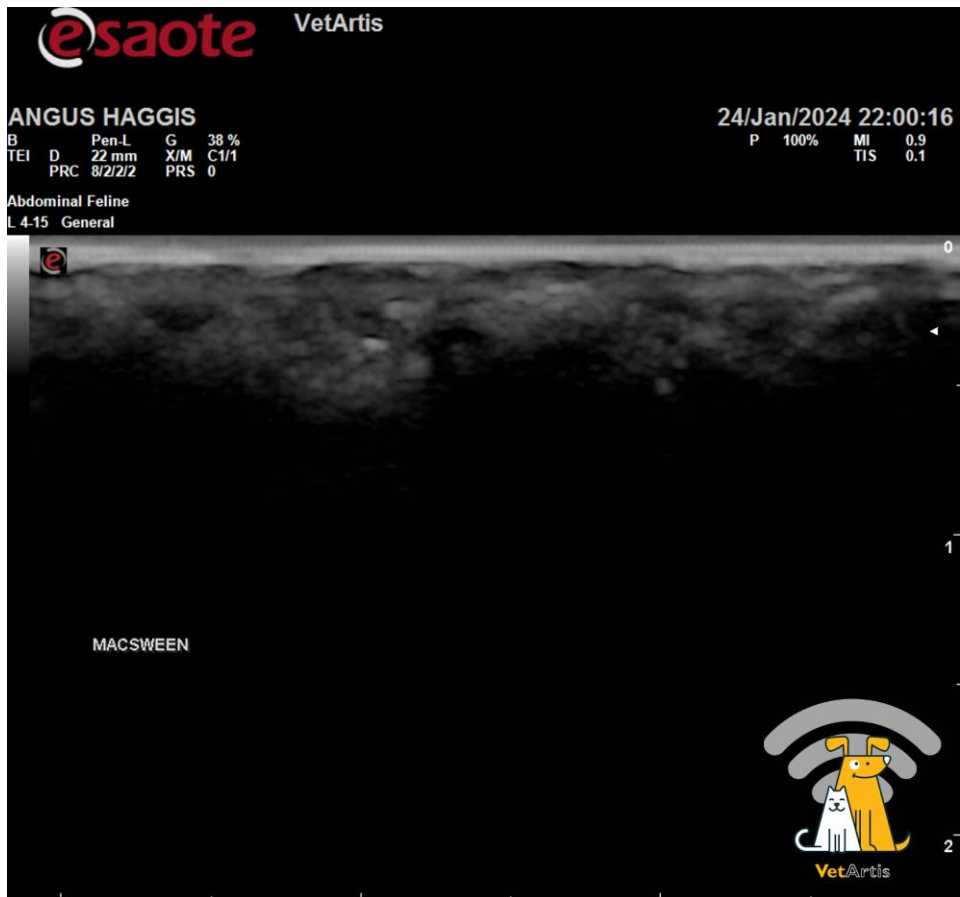


Figure 3 – Ultrasonographic appearance of subspecies of haggis ‘Halls’.

ANGUS HAGGIS

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B	Pen-L	G	38%
TEI	D 22 mm	X/M	C1/1
	PRC 8/2/2/2	PRS	0

P	100%	MI	0.9
		TIS	0.1

Abdominal Feline
L 4-15 General

