Treatment of Equine Sarcoid at a Referral Clinic:

A Retrospective Study of 70 Horses with 146 Sarcoid Lesions

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INTRODUCTION

The treatment of equine sarcoids presents a considerable challenge for veterinary professionals. Currently, more than 40 therapeutic methods are in use (Knottenbelt 2019), with the choice depending on the specific type of sarcoid and its anatomical location. As with any type of tumor disease, there is no universal treatment suitable for all lesions in all patients. Many therapeutic methods are costly and time-consuming, and some may pose additional potential risks to health and safety that should be carefully considered before selecting a specific treatment approach.

MATERIAL AND METHODS

A total of 70 horses with 146 sarcoid lesions met the inclusion criteria

Horses were treated at the Equine Clinic of VETUNI Brno between January 1st, 2019 and December 31st, 2023

They underwent a complete treatment of at least one tumour

The tumour met the clinical characteristics of equine sarcoid (Haspeslagh et al. 2018)

At least six months had passed since the last treatment

Sarcoids were categorized by its predominant clinical type as described earlier (Knottenbelt 2005) (Fig. 1) and anatomic location into six groups (Fig. 2).

Treatment modalities reflected the clinician's choice and comprised topical AW 5 cream application (n = 100), AW 5 cream-medicated ligature (n = 22), AW 5 cream combined with conventional surgery (n = 8), intralesional BCG vaccine (n = 4), Equicil (10% 5-fluorouracil cream) (n = 1), ligation alone (n = 6), imiquimod application (n = 1), castration ring in combination with AW 5 cream and conventional surgery (n = 4).

Therapeutic efficacy was assessed via clinical examination and follow-up data obtained from owners through a telephone questionnaire conducted at least six months after the final treatment.

Fig. 1: Predominant types of lesions treated (n = 146)

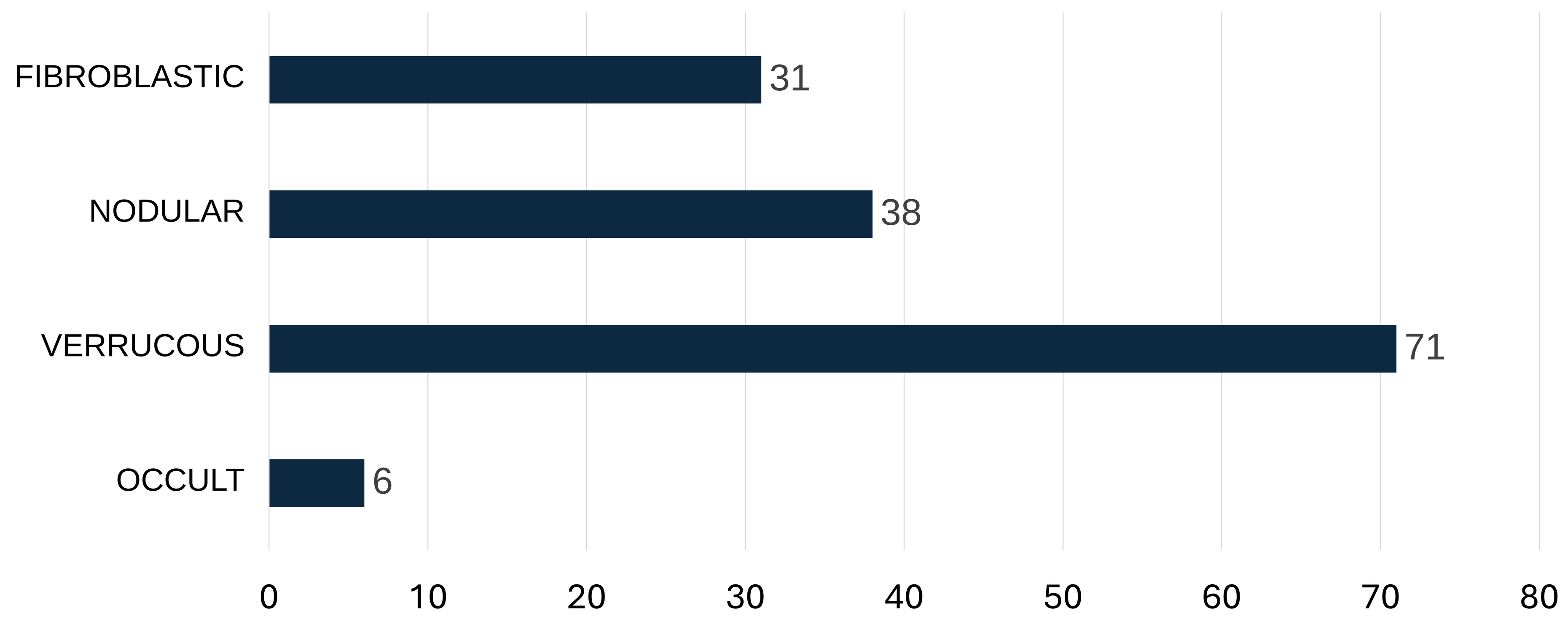
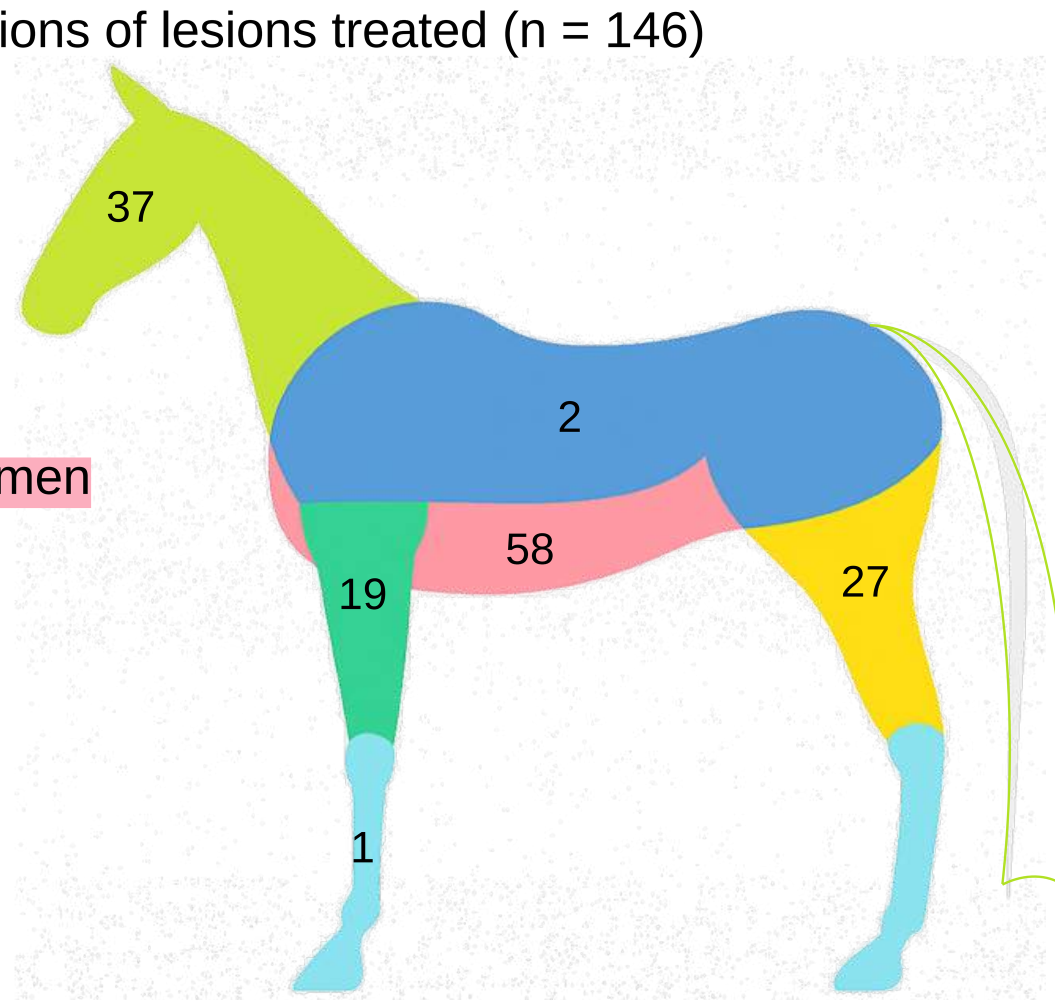


Fig. 2: Anatomic locations of lesions treated (n = 146)

1) Distal limb
2) Proximal thoracic limb
3) Pectoral area and ventral abdomen
4) Proximal pelvic limb
5) Dorsum
6) Head and neck



The average recurrence rate by lesion type, lesion location, and number of treatments was evaluated using the nonparametric Kruskal-Wallis test.

RESULTS

Alltogether 131 out of 146 lesions (89.7%) in our study were treated with AW 5 cream either alone (68.5%) or in combination with other methods (21.2%) (Fig. 3).

Fig. 3: Lesion count distribution by treatment type and its success rate

Treatment method	Lesions	Treated successfully
AW 5 cream (Fig. 4)	100	86 (86%)
AW 5 cream-medicated ligature	22	17 (77%)
AW 5 + conventional surgery	8	8 (100%)
Ligation	6	6 (100%)
BCG vaccine	4	4 (100%)
Conventional surgery	4	4 (100%)
Imiquimod cream	1	1 (100%)
Equicil	1	0
Castration ring + AW 5 cream	1	1 (100%)

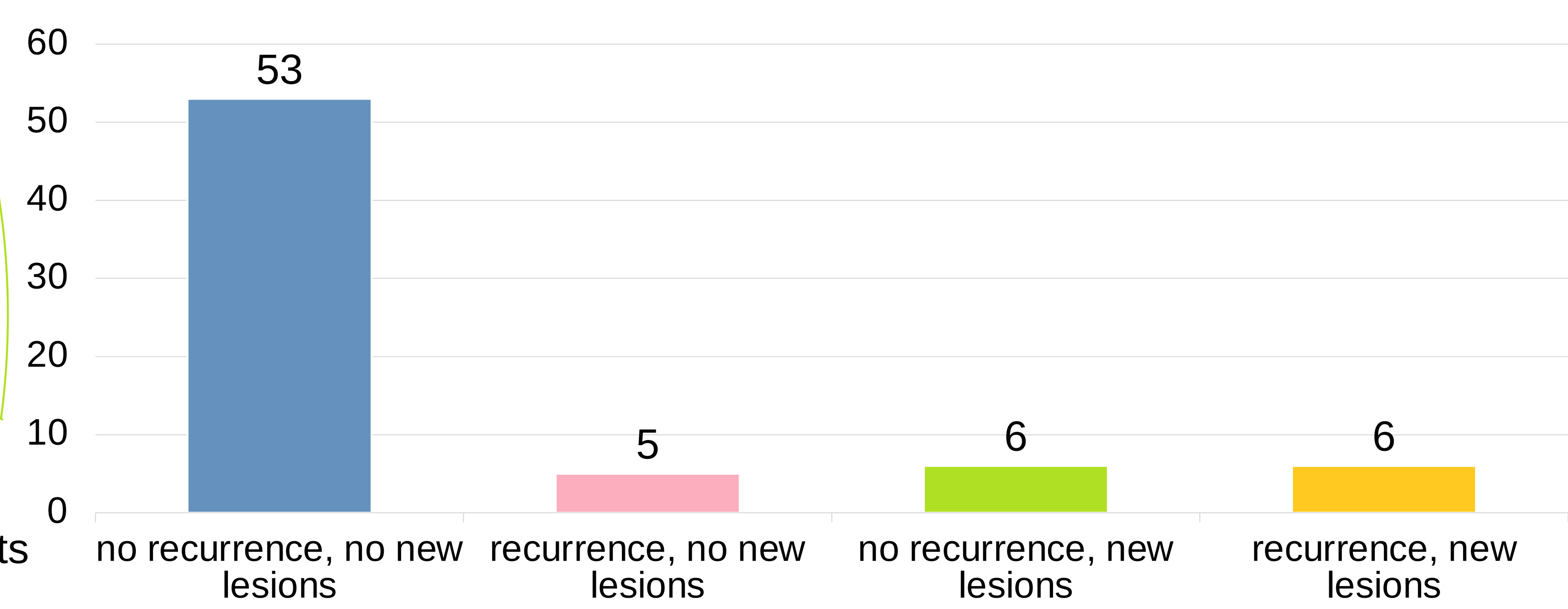
Fig. 4: Verrucous sarcoid at the base of the ear of a 17 years old warmblood mare, one treatment session of 5 applications of AW 5 cream were curative

Recurrence rates varied slightly by lesion type, being highest in fibroblastic and lowest in nodular lesions, without statistical significance. Time to recurrence was longest in occult and shortest in verrucous types, also not significant. The number of treatments differed significantly, with the highest in fibroblastic and lowest in occult lesions.

By lesion location, recurrence was highest in the proximal thoracic limb and lowest on the back and distal limb, with a significant difference. Time to recurrence was longest in the head and neck and shortest in the proximal thoracic limb, also significant. The number of treatments showed a similar pattern, with significant differences between locations.

The success of the therapy was evaluated by dividing the horses (n = 70) into four predefined categories (Fig. 5), with therapy considered successful if there was no recurrence. A total of 59 patients (84.3%) were successfully treated.

Fig. 5: Treatment outcome regardless of the treatment method



CONCLUSIONS

A regression rate of 84.3% can be considered very successful among other available and commonly used methods. Topical application of AW 5 cream represents a cost-effective treatment option for equine sarcoids, demonstrating a high level of efficacy. Lesions located in the proximal thoracic limb were statistically associated with the highest recurrence rate, shortest time to recurrence, and the greatest number of required treatments.

REFERENCES

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