

RETROSPECTIVE ANALYSIS OF TTF-ASSOCIATED CUTANEOUS INFECTIONS AND IMPACT ON CARE

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Introduction

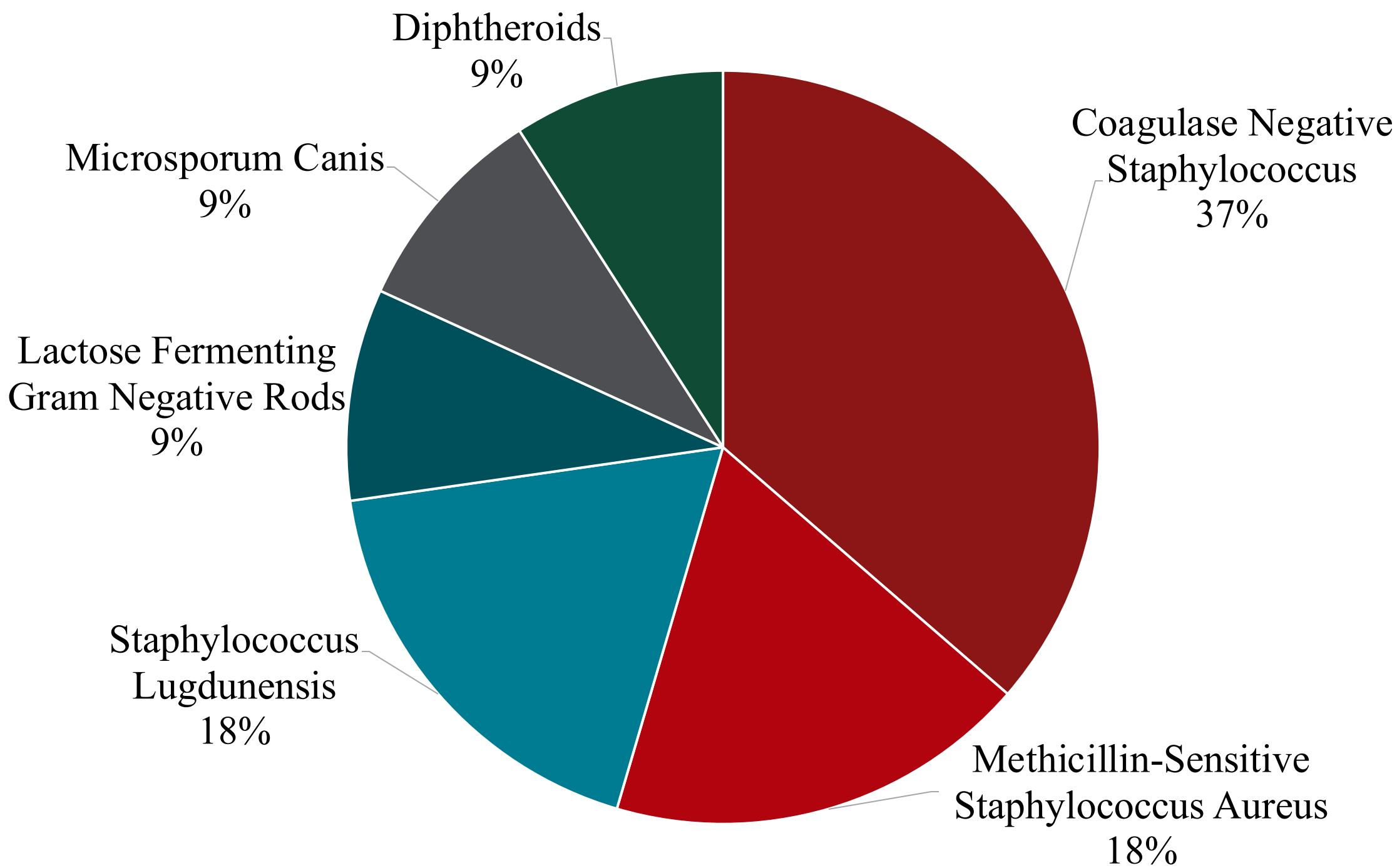
- Tumor treating fields (TTF) are a non-invasive treatment disrupting cancer cell proliferation in glioblastoma patients¹
- Dermatological adverse events including dermatitis, skin erosions, and infections have been outlined in the literature previously²
- Skin infections associated with TTF have never been characterized²

Methods

- Retrospective study of 38 patients with brain cancer at the Stanford Cancer Institute who were seen in dermatologic consultation during TTF therapy
- Charts of these patients were analyzed to collect clinical data information which included: brain cancer diagnosis, cutaneous side effects, results of skin microbiology cultures, and number of dermatology touchpoints
- Dermatology touchpoints are defined as office visits or virtual encounters by each patient

Results

Variable	Median Age at Initiation (Range)	Females (%)	Whites (%)	Asians (%)	Other Race (%)	Hispanic / Latino Ethnicity (%)	Unknown Ethnicity (%)	Avg. Dermatology Touchpoints (Range)	Avg. Treatment Duration (Range)
No Infection (n=31)	62 years (29 – 79 years)	10 (32.3%)	23 (74.2%)	3 (9.7%)	5 (16.1%)	3 (9.7%)	1 (3.2%)	6.8 (1 – 36)	484 days (23 – 2364 days)
Culture Positive Infection (n=7)	63 years (21 – 75 years)	2 (28.6%)	5 (71.4%)	1 (14.3%)	1 (14.3%)	1 (14.3%)	0 (0%)	13.6 (6 – 49)	423 days (141 – 764 days)



Conclusions

- Secondary infection in patients led to decreased duration of TTF and required increased dermatological support
- Staphylococcal infections were most common
- This characterization improves overall prophylactic treatment regimens
- Simultaneous preventative and reactive strategies through multidisciplinary care is necessary
- Ensure we protect against infections, decrease treatment interruptions, and improve patient quality of life and outcomes

References

1. Novocure Website. Optune Gio Instructions for use Page – accessed June 6, 2025. <https://www.optunegio.com/instructions-for-use>
2. Lacouture ME, et al. Seminars in Oncology, 2014 Jun doi:10.1053/j.seminoncol.2014.03.011.