

Demodex Blepharitis and Coexisting Bacterial Burden in Eye Care Patients: The Pandora Study

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PURPOSE

- 1 Evaluate the bacterial composition on the eyelid margin of patients with and without collarettes

METHODOLOGY



Subject Demographic

Without *Demodex* blepharitis (mean age 63.7±13.9 years) n=26

69.2% ♀ 30.8% ♂

With *Demodex* blepharitis (mean age 70.9±7.2 years) n=38

50.0% ♀ 50.0% ♂

100 patients



Study Design

Ongoing prospective, single-center, observational study
Clinical measurements signifying *Demodex* blepharitis:

- Without *Demodex* blepharitis
 - Collarette Grade 0: 0-2 lashes with collarettes
- With *Demodex* blepharitis
 - Collarettes Grade 2-4: >10 collarettes to ≥2/3 (~150) lashes with collarettes

All eyelid/conjunctival swabs sent for culture on blood, Chocolate and Sabouraud agar plates, and Gram staining.



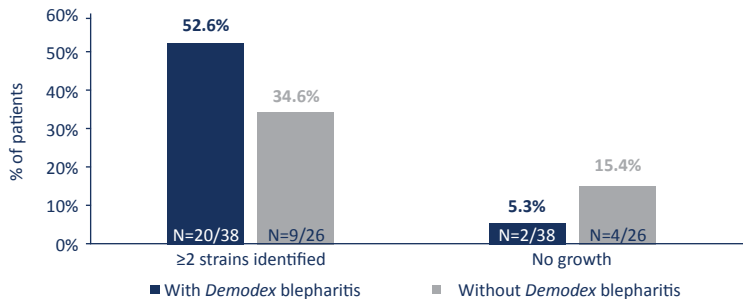
Study Site(s)

- 1 US site

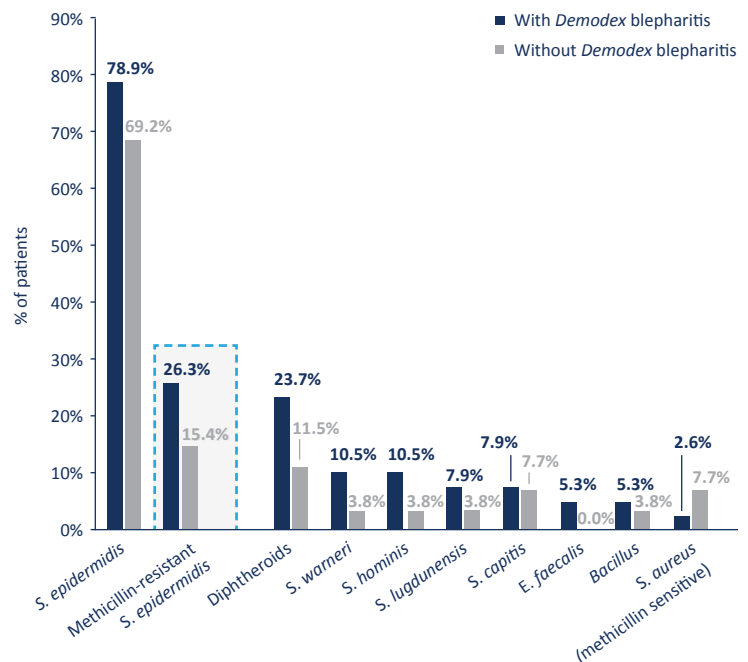
FINDINGS

See the graphs below that highlight **bacterial presence**, specifically those bacteria seen in *Demodex* blepharitis patients.

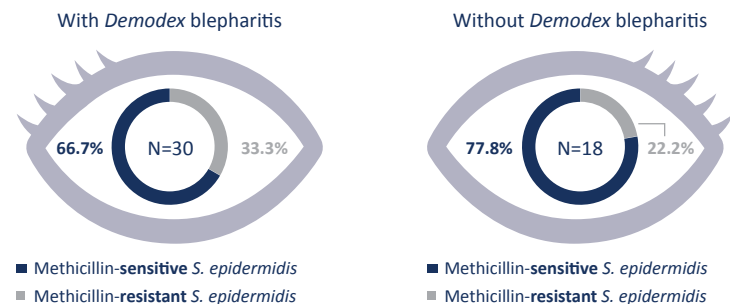
≥2 strains of lid margin/conjunctival fornix bacteria



More *Demodex* blepharitis patients harbored divergent strains



Among patients with *S. epidermidis*, methicillin resistance was more commonly isolated in *Demodex* blepharitis patients



CONCLUSION



Demodex blepharitis patients may facilitate or be a vector for a greater number of bacteria (methicillin-resistant *S. epidermidis*, *E. faecalis*, *S. hominis*, *S. warneri*, *S. lugdunensis*, *Bacillus*, and diphtheroid strains).



Majority of methicillin-resistant *S. epidermidis* patients (n=13 of 14 eyes; ~93%) appear resistant to multiple drugs.



A larger sample size study is needed to confirm observed trends.