

Pediatric Demodex: A Case Series

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ABSTRACT

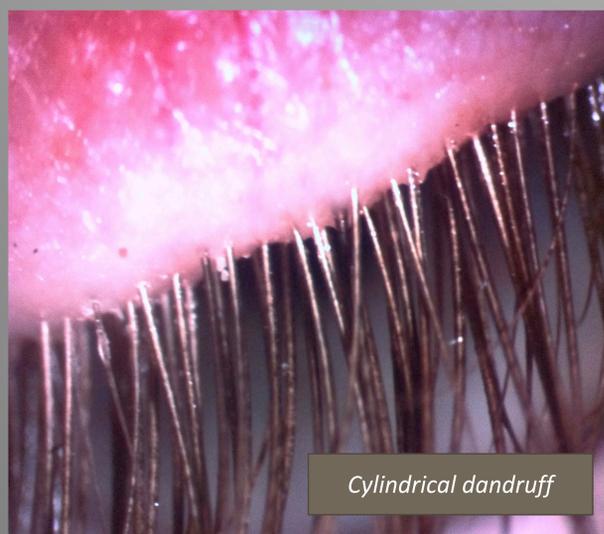
Demodex folliculorum is normally found in older individuals, age 70 and above. In this series, 8 cases of *demodex folliculorum* were diagnosed in children 21 years and younger. Subjects ranged in age 8-21. There were 4 males and 4 females. Cylindrical dandruff was present in each case. CD severity ranged from mild to severe. Three cases were diagnosed by the presence of cylindrical dandruff alone. Five cases were further diagnosed utilizing the following clinical diagnostic protocol:

1. If cylindrical dandruff (CD) was observed, lashes were epilated.
2. Lashes were placed on a glass slide; a cover slip and a drop of saline/fluorescein dye was applied to the slide
3. Examination performed with a Celestron LCD digital microscope (objective Lenses: 4x, 10x, and 40x). Presence of one mite or more was considered *demodex*.

Patient management included lid scrubs with baby shampoo, steroid/antibiotic combination eye drops, and tea tree oil (TTO) lid wipes at home and/or in-office 50:50:TTO:Macadamia nut oil with tetravisc anesthesia. Demodex blepharitis can be present in young patients and may be more common than conventional wisdom suggests.

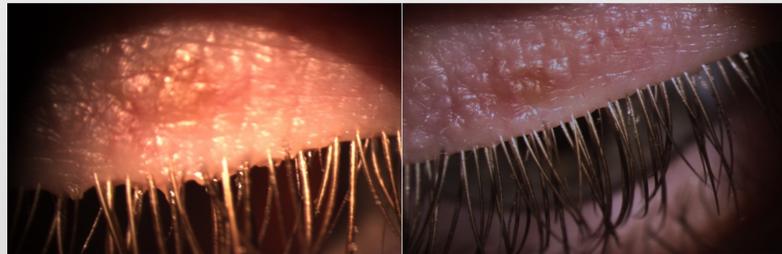
METHOD

- Subjects included 4 males and 4 females, between ages 10-21, mean age 14.13.
- Cylindrical dandruff (CD) was present in each case. CD severity ranged from mild to severe.
- Three cases were diagnosed by the presence of CD alone.
- Five cases were further diagnosed utilizing the following clinical diagnostic protocol:
 1. If CD was observed, lashes were epilated.
 2. Lashes were placed on a glass slide; a cover slip and a drop of saline/fluorescein dye was applied to the slide
 3. Examination performed with a Celestron LCD digital microscope (objective Lenses: 4x, 10x, and 40x).
- Presence of one mite or more was considered *Demodex*.



Cylindrical dandruff

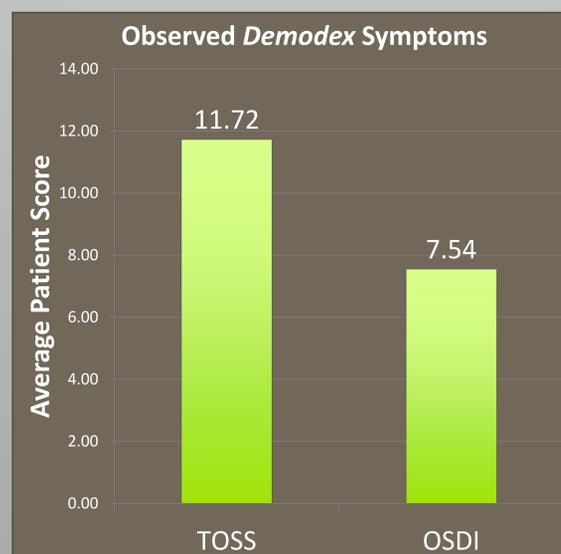
CD Severity: 1-4 scale
Greasy/Oily: lash appearance, 1-4 scale
Distention: 1-4 scale



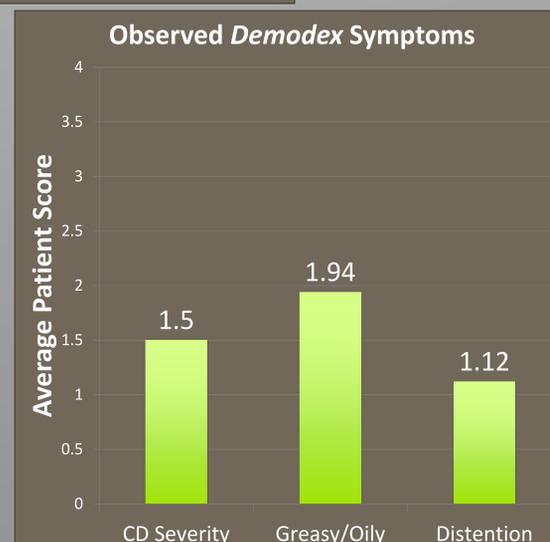
Patient 8, before and after TTO treatment. Note dramatic decreases in CD and distention.

OBSERVATIONS

Patient	Age	Gender	# Mites	Notes
1	13	F	4	Presented with complaints of itch
2	11	F	0	Presented with no complaints, grade 2 CD
3	13	F	1	Presented with mild itch
4	16	M	0	Presented with minimal symptoms, responded well to TTO lid wipes
5	12	M	2	Presented with watery eyes, responded well to TTO lid wipes
6	10	F	0*	Presented with no symptoms, grade 2 CD *observed mite molts
7	17	M	1	History of Accutane use, responded well to TTO lid wipes
8	21	M	7	Grade 2 CD and distention. Signs of blepharitis were resolved with one month of BID TTO lid wipes 2x per day

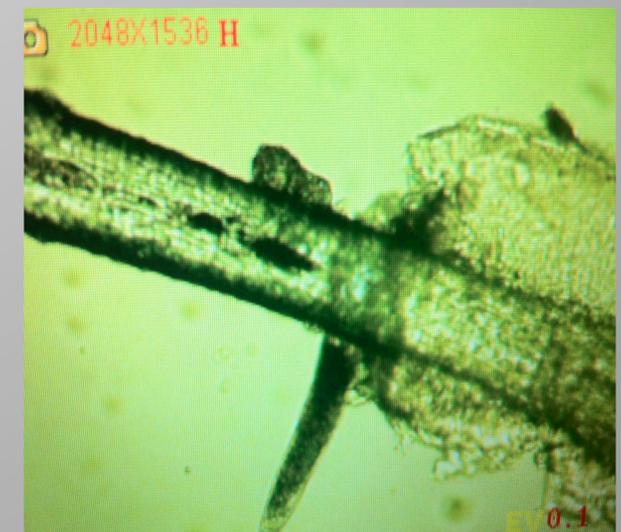


TOSS: Total Ocular Symptom Score (allergy-biased)
OSDI: Ocular Surface Disease Index (dry eye-biased, < 13 is normal)



TREATMENT

- All subjects were ultimately managed with tea tree oil lid wipes.
- Frequency ranged from BID to qhs, depending on severity of the cylindrical dandruff.
- 5 of the 8 have been seen for follow up; 4 showed improvement, 1 remained stable.



Demodex folliculorum on a lash

CONCLUSION

Demodex blepharitis can be present in young patients and may be more common than conventional wisdom. Signs may exceed symptoms.

REFERENCES

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