

EDUCATIONAL MOMENTS



THE VISION CARE
INSTITUTE®
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Johnson & Johnson s.r.o.

INSPIRING CARE

How to manage patients with Lid Parallel Conjunctival Folds (LIPCOF)

1. WHAT YOU NEED TO KNOW

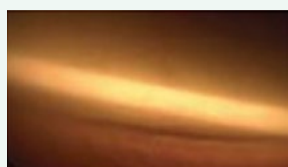
Slit Lamp Viewing:

1. Diffuse beam
2. Medium magnification (16-27x)
3. Direct illumination

No CL or dyes. Evaluate perpendicular to temporal and nasal limbus on bulbar conjunctiva above lower lid

Grading:

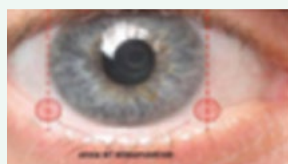
A combined score (LIPCOF Sum) can be calculated by adding nasal and temporal LIPCOF grades



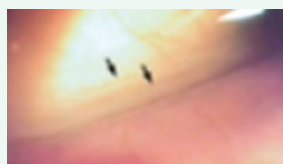
Grade 0: No conjunctival folds



Grade 1: One permanent and clear parallel fold



Grade 2: Two permanent and clear parallel folds (normally <0.2mm)



Grade 3: More than two permanent and clear parallel folds (normally >0.2mm)

Incidence:

- 73 % of CL wearers (40 % ≥ grade 2)
- In non-CL wearers, 57 % have LIPCOF Sum of ≤ 1
- Correlates with lid wiper epitheliopathy (LWE, right), bulbar hyperaemia, limbal hyperaemia (temporal LIPCOF only), tear film stability and volume, mucin quantity and dry eye symptoms



Aetiology:

- Possible causes are conjunctival looseness, decrease of elastic fibres, ageing or mechanical forces between lower lid and conjunctiva

Symptoms:

- Dryness. Combine with non-invasive break-up time (NIBUT) and Ocular Surface Disease Index (OSDI) questionnaire as best predictive tests for dry eye

Signs:

- Folds in temporal and nasal lower quadrants of bulbar conjunctiva, parallel to lower lid

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2. WHAT YOU NEED TO RECOMMEND YOUR PATIENTS

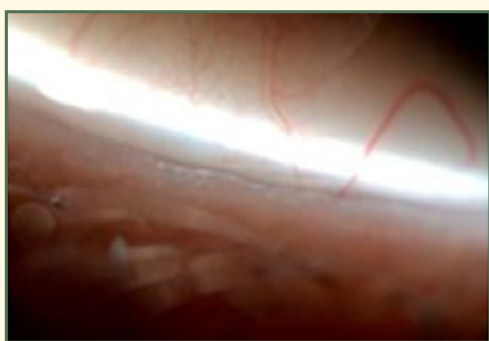
Recommendations:

- Manage \geq grade 2 or if symptoms
- Refit with more lubricious lens surface
- Change lens type (silicone hydrogel to hydrogel) or wearing schedule (increase replacement frequency, reduce wearing time)
- Maintain good lens cleaning including rub and rinse step
- Manage any tear quality issues
- Rewetting drops or liposome sprays

Prognosis:

Generally good resolution of symptoms with appropriate management

Differential Diagnosis:



- Parallel permanent conjunctival folds, disrupted microfolds or conjunctival flaps (left)
- LIPCOF disappears when lower lid is lifted

3. HOW TO FIND OUT MORE

- ▶ Click [here](#) for our guide to assessing the tear film
- ▶ Click [here](#) for a refresher on slit lamp techniques
- ▶ Click [here](#) to access the OSDI questionnaire
- ▶ Click [here](#) for further reading/references

This series is adapted from A Handbook of Contact Lens Management (3d Edition) published by THE VISION CARE INSTITUTE®

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PATIENT CASE STUDY

When you have read this guide and our recommended resources, why not take part in THE VISION CARE INSTITUTE® self-assessment quiz to test your clinical diagnostic and management skills. Choose only one answer to each question then check the answers at the foot of the page to see whether it's correct. Good luck!



Patient AC is a 56-year-old company director who has worn a variety of soft contact lenses over a period of nearly 35 years and is currently wearing monthly replacement silicone hydrogel lenses. She returns to the practice two months after her last check-up complaining of dry eyes.

Questions:

1. What slit lamp technique would you use to examine this patient's lids for LIPCOF?

- A. Fluorescein dye and cobalt blue filter
- B. Indirect illumination
- C. Diffuse beam, medium magnification
- D. Specular reflection

2. Two temporal conjunctival folds are visible. What grade would you give to the LIPCOF?

- A. Grade 0
- B. Grade 1
- C. Grade 2
- D. Grade 3

3. Which of the following dry eye assessments might you use for this patient?

- A. Measure non-invasive break-up time (NIBUT)
- B. Measure tear meniscus height to assess tear volume
- C. Have the patient complete the OSDI questionnaire
- D. Any of these options

4. Which of the following management options could you consider?

- A. Refit with lenses with a more lubricious lens surface
- B. Make sure the patient includes a rub and rinse step in the cleaning regime
- C. Recommend rewetting drops or liposome sprays
- D. Any of these options

1. The correct answer is C. A diffuse beam, 18-27x magnification and direct illumination is best for examining the conjunctiva for LIPCOF

2. The correct answer is C. Two permanent and clear parallel folds indicate grade 2 LIPCOF

3. The correct answer is D. Tear film stability (right), tear volume and dry eye all correlate with LIPCOF so all these would be appropriate

4. The correct answer is D. LIPCOF grade 2 and over should be managed and any of these management options could be considered

