

# EDUCATIONAL MOMENTS

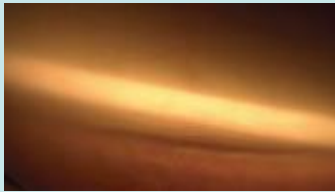
## INSPIRING CARE

### 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

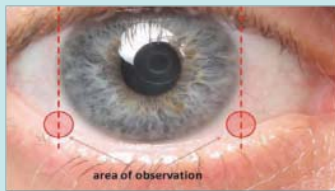
**Grading:** A combined score (LIPCOF Sum) can be calculated by adding nasal and temporal LIPCOF grades



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 FOR SHORT VIDEOS ON SLIT LAMP TECHNIQUES](#)
- [CLICK HERE TO ACCESS THE OSDI QUESTIONNAIRE](#)
- [CLICK HERE FOR FURTHER READING/REFERENCES](#)

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## INSPIRING CARE



VISION CARE INSTITUTE

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

#### Patient Case Study

When you have read this guide and our recommended resources, why not take part in Johnson & Johnson 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	C. Diffuse beam, medium magnification
B. Indirect illumination	D. Specular reflection
  
- 2 Two temporal conjunctival folds are visible. What grade would you give to the LIPCOF?**

A. Grade 0	C. Grade 2
B. Grade 1	D. Grade 3
  
- 3 Which of the following dry eye assessments might you use for this patient?**

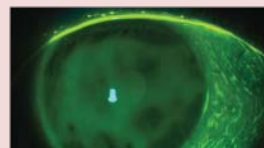
A. Measure non-invasive break-up time (NIBUT)	C. Have the patient complete the OSDI questionnaire
B. Measure tear meniscus height to assess tear volume	D. Any of these options
  
- 4 Which of the following management options could you consider?**

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