

## CLINICAL POLICY ADVISORY GROUP (CPAG)

### Photodynamic Therapy for Management of Central Serous Chorioretinopathy (CSCR) Policy

#### Statement

Derby and Derbyshire ICB (DDICB), in line with its principles for procedures of limited clinical value has deemed that **Photodynamic Therapy for the Management of Central Serous Chorioretinopathy (CSCR)** should not routinely be commissioned.

These commissioning intentions will be reviewed periodically. This is to ensure affordability against other services commissioned by the ICB.

## 1. Background

Central serous chorioretinopathy (CSCR) is characterized by a serous detachment of the neurosensory retina in the macular region. CSCR can be defined as Acute or Chronic. Acute tends to resolve spontaneously within 3-6 months whilst Chronic is present for longer than 3-6 months. Photodynamic therapy (PDT) is a treatment that involves light-sensitive medicine (verteporfin) and a light source to destroy abnormal cells.

## 2. Recommendation

Photodynamic Therapy for Management of Central Serous Chorioretinopathy should not routinely be commissioned. On the basis that the studies are:

- Often small scale (and were not sufficiently powered to draw accurate conclusions)
- Frequently lacked a control arm (making the true impact of PDT difficult to establish)
- Focused on changes in eye anatomy, rather than impact on patient's vision and/or changes in vision were not statistically significant

## 3. Rationale for Recommendation

The Policy was last updated in March 2019 with the additional references but no change in Policy. A further search was undertaken in November 2021 (inc. Cochrane Library, Medline and PubMed) from which another 6 research papers were referenced.

Although the research and evidence suggest that PDT is useful for the treatment of CSCR. Other treatment options such as Subthreshold Micropulse Laser Therapy, Transpupillary Thermal Therapy, Mineralocorticoid Receptor Antagonists, intravitreal anti-angiogenic drugs, Anti-Androgenic drugs have been described in research papers.

A meta-analysis compared the therapeutic effect and safety of SMLT vs PDT in treatment of CSCR. Four RCTs and 5 retrospective studies with 790 eyes were included in this meta-analysis after study selection. The results showed that SMLT significantly improved the best-corrected visual acuity compared with PDT at 6 to 8 weeks, 6 months, and 7 to 8 months in patients with CSCR. They concluded that on the available evidence, this meta-analysis demonstrated that SMLT may be considered as a competitive alternative to PDT for treating CSCR, and as the first-line treatment of CSCR. They noted that the mean treatment duration varied between studies and that further studies should include both a larger sample size and longer follow up time to determine the best treatment for CSCR.

Currently there are no guidelines by either NICE or SIGN with respect to the use of PDT for CSCR and there is currently no standard treatment for CSCR. The evidence for any treatment is limited. The optimal treatment schedule for PDT (in terms of fluence and verteporfin dose) is still subject to research and remains to be confirmed.

## 4. Useful Resources

- Photodynamic Therapy NHS. <https://www.nhs.uk/conditions/photodynamic-therapy/>

## 5. References

- Interventions for central serous chorioretinopathy: a network meta-analysis. Salehi Mahsa The Cochrane database of systematic reviews 2015;(12):CD011841-.
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- Semeraro F, Morescalchi F, Russo A, Gambicorti E, Pilotto A, Parmeggiani F, Bartollino S, Costagliola C. Central Serous Chorioretinopathy: Pathogenesis and Management. *Clin Ophthalmol*. 2019 Dec 2;13:2341-2352. doi: 10.2147/OPHTH.S220845. PMID: 31819359; PMCID: PMC6897067.
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- Central serous chorioretinopathy: what we have learnt so far. Wong KH1 , Lau KP1 , Chhablani J2 , Tao Y3 , Li Q1 , Wong IY1 . *Acta Ophthalmol*. 2016 Jun;94(4):321-5. doi: 10.1111/aos.12779
- Interventions for central serous chorioretinopathy: a network meta-analysis. Salehi Mahsa The Cochrane database of systematic reviews 2015;(12):CD011841
- System review and meta-analysis on photodynamic therapy in central serous chorioretinopathy. *Ma Jinlan Acta Ophthalmol* 2014;92(8):e594

## 6. Appendices

### Appendix 1 - Consultation

All relevant providers/stakeholders will be consulted via a named link consultant/specialist. Views expressed should be representative of the provider/stakeholder organisation. CPAG will consider all views to inform a consensus decision, noting that sometimes individual views and opinions will differ.

Consultee	Date
Consultant Ophthalmologist (CRHFT)	October 2021
Consultant Ophthalmologist (UHDBFT)	October 2021
Consultant Ophthalmologist (CRHFT)	October 2021
Clinical Policy Advisory Group (CPAG)	December 2021
Clinical and Lay Commissioning Committee (CLCC)	January 2022
Consultant Ophthalmologist (CRHFT)	June 2024
Consultant Ophthalmologist (UHDBFT)	June 2024
Clinical Policy Advisory Group (CPAG)	July 2024

### Appendix 2 - Document Update

Document Update	Date Updated
<u>Version 2.0</u> <ul style="list-style-type: none"><li>Policy has been re-worded and reformatted to reflect the DDCCG clinical policies format. This includes the addition of background information, useful resources, references and consultation</li></ul>	November 2021
<u>Version 2.1</u> <ul style="list-style-type: none"><li>CPAG agreed to extend the review date of this policy by 12 months, in agreement with clinical stakeholders, due to reduced capacity within the Clinical Policies team</li></ul>	July 2024
<u>Version 2.1</u> <ul style="list-style-type: none"><li>In line with risk profile, CPAG agreed further extension to review date</li></ul>	September 2024