Subclinical Lymphocytic Malignancies (SLM) are associated with a higher risk of post-operative endophthalmitis

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A Case Series studying a previously unreported risk factor

***SLM** – A white cell cancer that is currently below clinical threshold for treatment: either detected but not warranting treatment yet, or being monitored post-treatment.*

Age and sex	Procedure	VA on initial endophthalmitis diagnosis	Final VA post treatment	Presentation Post-Op (Days)	Known SLM
79 Male	Phaco and IOL	Counting fingers	0.20 LogMAR	4	Chronic Lymphocytic Leukaemia
70 Female	Pars Plana Vitrectomy	Hand Movements	0.06 LogMAR	2	Hodgkins Nodular Sclerosis
90 Female	Intravitreal Injection Anti-VEGF (nARMD)	Hand Movements	Hand Movements	4	Chronic Lymphocytic Leukaemia

50% of ALL patients with post-op endophthalmitis over two years in our trust had a known SLM

SLM may cause increased endophthalmitis risk even without immunosuppressive therapies

- There is **strong evidence** in other specialties that SLM **predisposes to post-operative infection** [1-3]
- However there is no published evidence for it as an influential factor in post-op endophthalmitis [4]
- We believe this may be the first indication that SLM could be **a factor in post-op endophthalmitis risk**.

Should we change our practice?

- While numbers are small, endophthalmitis is a devastating complication
- We recommend noting any patients undergoing intraocular procedures who have a history of Lymphocytic Malignancy as **HIGH RISK** and consideration of a dilated fundoscopy at 48hrs post op
- This is especially important in patients with cognitive impairment which may otherwise delay presentation

1. Andersen MA, Rostgaard K, Niemann CU & Hjalgrim H. Antimicrobial use before chronic lymphocytic leukemia: a retrospective cohort study. *Leukemia* (2020).
2. NICE guideline NG125. Surgical site infections: prevention and treatment. 2019.
3. Duane, TM. American College of Surgeons and Surgical Infection Society: Surgical Site Infection Guidelines, 2016 Update. *Journal of the American College of Surgeons* **224(1),** 59-74 (2017).
4. Rahmani S & Eliott D. Postoperative Endophthalmitis: A Review of Risk Factors, Prophylaxis, Incidence, Microbiology, Treatment, and Outcomes. *Semin Ophthalmol* **33(1),** 95-101 (2018).

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