with other benign or malignant lesions—sebaceous gland carcinoma being the most frequently misdiagnosed malignancy.² WG is a multisystem disease of unknown aetiology characterized by granuloma formation, necrosis and variable degrees of small to medium-sized vessel vasculitis.³ Clinical presentation is most common with initial upper or lower respiratory tract, renal, or orbital symptoms.⁴ The main orbital signs of the disease are proptosis, scleritis, and lid inflammation,⁵ but WG mimicking the presentation of a chalazion has not been reported in the literature. Biopsy results in cases of WG with orbital involvement can be difficult to interpret as there are a spectrum of histopathological features, and the classic triad of vasculitis, tissue necrosis, and granulomatous inflammation may only be present in about one-half of cases.⁶ A positive assay for cANCA with specificity for proteinase-3 or myeloperoxidase provides strong evidence if WG is suspected. Diagnosis of orbital WG therefore requires correlation of the clinical signs, use of the cANCA test and comparison with extraorbital biopsies, if available. This case highlights an atypical presentation of WG to the ophthalmologist, with resolution after conventional systemic treatment of the underlying disorder.

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Sir, Hospital cataract surgery volume and postoperative endophthalmitis

The use of population-based linked administrative data as in Fang *et al*'s¹ recent paper is one of the best ways to investigate cataract surgery outcomes. It provides adequate power for statistical analysis, and eliminates issues of sampling and ability to generalise the results associated with smaller cohort studies and controlled trials. In particular, it represents the 'real life' of the treatment provided to that population.^{2,3}

We read with interest Fang *et al*'s¹ description of an association between cataract surgery volume and the risk of postoperative endophthalmitis. Their quoted 2-year incidence postoperative endophthalmitis of 0.84% seems high compared to most other recent reports. Using the same population-based linked data approach, we have looked at cataract outcomes in Western Australia over a 21-year period.^{3–6} In our own study, we undertook a comprehensive process of validation of the endophthalmitis cases reported in the database. We found that the International Classification for Diseases codes for endophthalmitis were frequently misused for other eye conditions.⁴ As it does not appear that Fang *et al* validated the coded diagnosis of endophthalmitis, could the apparently high rate in Taiwan and the associations with hospital volume be spuriously inflated due to misclassification of other ocular infections as endophthalmitis?

Notwithstanding, their finding that the technique of cataract extraction did not alter endophthalmitis risk was consistent with our own studies.^{5,6} This reinforces the importance of multifactorial risk reduction rather than just concentrating on surgical technique to prevent postoperative endophthalmitis.

Using unadjusted and multivariate adjusted Cox regression analyses, Fang *et al* reported that the risk of endophthalmitis was higher at low volume compared to high volume hospitals. Although they discussed the possibility that the differences may be due to referral bias or difference in expertise and systems of care, they did not discuss nor analyse another potential confounding effect, the length of stay in hospital. There were four times as many in-patient cataract operations in high volume compared to low volume hospitals. We previously found that same-day admissions for cataract surgery posed a higher risk for postoperative endophthalmitis. After

adjusting for length of stay and other factors, we found that a hospital's cumulative cataract surgery volume was not associated with endophthalmitis risk.⁵

Despite the limitations of the administrative data used by Fang *et al*, we applaud their investigative approach. Such population-based methodologies provide large unbiased samples that are necessary to properly investigate uncommon but serious problems such as postoperative endophthalmitis.^{2,6}

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Sir, Hospital and surgeon operation volume associated with endophthalmitis

We thank Dr Ng *et al*. for their interest and comments on our report. In our study, we use a broader definition as: codes of endophthalmitis in subsequent outpatient visits or admissions, or at the index cataract surgery were considered as the occurrence of postoperative endophthalmitis. Concerning the use of this definition, for we believe that postoperative endophthalmitis is not necessarily treated in admission, and this condition can also be treated in outpatient visits. Unlike EPSWA study and other previous studies using hospital-based data or define admission for endophthalmitis as the occurrence of postoperative endophthalmitis.^{1–3} If we use the definition as EPSWA study for endophthalmitis as the index of occurrence, we would exclude patients that were only treated in outpatient clinics but not in hospitals. Therefore, the incidence of postoperative endophthalmitis will be underestimated. The 2-year incidence of postoperative endophthalmitis in Taiwan will be 0.26%. It is similar to Dr Ng's report.

Different from what Dr Ng pointed out, we did consider the length of stay as an important factor and control this variable in Cox regression analysis in our study, as presented in Table 4 of our previous article.⁴ In our study population, there were 88.1% outpatient cataract surgery and 11.9% inpatient cataract surgery with 1.53 ± 0.80 days of the mean length of stay. As the percentage of inpatient cataract surgery was relatively low and the length of stay was short, we used 'site of operation' as the variable and divided patients into the outpatient and inpatient cataract surgery categories. Even after we adjusted site of operation and other factors, we found that hospital volume and surgeon volume were still significantly associated with endophthalmitis risks. Unlike EPSWA report,⁵ we found that inpatient cataract surgery posed a higher risk for postoperative endophthalmitis than outpatient cataract surgery in hospital volume model (HR = 1.33, $P = 0.014$), but not in surgeon volume model (HR = 1.25, $P = 0.065$).

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