

**Sir,
Dexamethasone implant in diabetic macular edema in real-life situations**

We read with interest the recent paper by Chhablani *et al*¹ reporting the outcome of recalcitrant and naive eyes with diabetic macular edema (DME) treated with intravitreal dexamethasone implant (Ozurdex) injection. Although the study is indeed interesting, there are certain points we wish to highlight. First, as systemic hypertension is a risk factor for the development of both diabetic retinopathy and DME, and hyperlipidemia increases the risk of leakage and exudative deposits in the macula,² blood pressure and lipid profile should have been recorded at baseline and at subsequent visits to assess whether improvement in macular edema was as a result of strict systemic control or as a result of the implant itself. Second, according to the authors, 7 eyes had proliferative diabetic retinopathy (PDR), and 26 had lasered PDR. These 26 eyes had undergone panretinal photocoagulation, minimum of 4 months before the first Ozurdex implant was administered. What about the remaining seven eyes that had PDR? Were they lasered during the follow-up period after implant insertion? If panretinal photocoagulation was performed during the follow-up, it could acutely worsen the DME and affect the visual outcomes.³ Third, authors need to rectify the discrepancy in the values; in the manuscript, it is mentioned that 'mean treatment-free interval among naive eyes and previously treated eyes was 10.53 ± 7.8 and 6.5 ± 4.5 months, respectively', whereas in Table 1, the mean treatment-free interval in previously treated eyes has been written as 6.17 ± 3.3 months.

Conflict of interest

The authors declare no conflict of interest.

References

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**Sir,
Dexamethasone implant in diabetic macular edema**

We thank Gupta and Ram¹ for their interest in our publication² on dexamethasone implant in diabetic macular edema (DME). Because of the retrospective nature of the study, we could not get the complete information on systemic factors such as hypertension and lipid profile. However, recently, Singh *et al* reported that the vision outcome with ranibizumab in DME was not influenced by systemic factors such as diabetes medication history, serum glucose, HbA1c, renal function, and blood pressure in the RIDE and RISE phase 3 studies.³

Seven eyes underwent panretinal photocoagulation (PRP) during the follow-up. We agree with the authors that there could be slight increase in the macular edema after PRP and may have affected the final outcome. Interestingly, a recent prospective study by Lee *et al*⁴ showed no effect on visual acuity of PRP at 12 months irrespective of persistent macular edema.

We thank the authors once again for this interesting discussion.

Conflict of interest

The author declares no conflict of interest.

References

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**Sir,
Data from UK Biobank on febrile illness**

I read with interest the article by Guggenheim *et al*¹ describing the relationship between febrile illness in childhood and myopia.

UK Biobank collected data on 502 649 subjects, aged 37 to 73, during 2006 to 2010. Febrile illness history was ascertained during the face-to-face interview, when participants self-reported cancer and non-cancer illnesses, including the date of diagnosis by a doctor. The available illness-response terms included pneumonia, encephalitis, meningitis, rheumatic fever, measles, rubella, mumps, diphtheria, and pertussis.

A total of 91 592 participants with visual acuity data were included in the analysis.

The figures on page 4 report the number of cases of these conditions in this group.

Illness	Number of cases in 91 592 participants	Proportion reporting illness
Pneumonia	993	1.08%
Encephalitis	54	0.06%
Meningitis	303	0.33%
Rheumatic fever	206	0.22%
Measles	657	0.72%
Rubella	230	0.25%
Mumps	418	0.46%
Diphtheria	32	0.03%
Pertussis	207	0.23%

During the childhood of most of the Biobank participants, between 150 000 and 800 000 cases of measles were reported each year in England and Wales,² and in 1963, 150 of every 1000 children were reported as having measles. So it seems unlikely that the proportion in Biobank ever reporting measles would be 0.72%.

The main Biobank website³ reports 2737 reporting measles in 378 597 participants, again 0.72%. In addition, 61 147 (16%) with asthma, 5893 (1.6%) with rheumatoid arthritis, and 15 761 (4.2%) people with fractures were reported.

Conflict of interest

The author declares no conflict of interest.

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Sir, Response to: 'Data from UK Biobank on febrile illness'

We thank Mrs Stratton for highlighting that the figure of 0.7% for the self-reported history of measles infection in UK Biobank participants¹ is far lower than the likely true prevalence in this cohort.

Most UK Biobank participants were born between 1937–1970, and routine measles vaccination² in the UK began in 1968. Thus, most participants would not have been vaccinated against measles during childhood. Prior to vaccination, ~99% of children were seropositive for measles antibodies, suggesting that exposure to the virus was ubiquitous.²

Self-reported measles infection was calculated from the following two interview questions, firstly, 'Has a doctor ever told you that you have had any other serious medical conditions or disabilities?' (the 'other' referring to cancer, which was discussed separately during the interview), and secondly, 'In the touch screen you selected that you have been told by a doctor that you have other serious illnesses or disabilities, could you now tell me what they are?'. We suspect the phrase 'serious medical conditions' contributed to the low self-reports of measles, since for most participants a measles infection may not have been perceived as serious.

We observed¹ that high myopia was more common in participants who did vs did not report having measles before 17 years of age (OR = 1.48, 95% CI = 1.07–2.07). Since childhood measles infection was nearly ubiquitous, this association likely reflects, in reality, an association between high myopia and an unusually serious or debilitating measles infection. In support of this, we saw similar associations with reports of certain other febrile illnesses.

Self-report is a widespread tool in epidemiology with recognised strengths and limitations.³ Accuracy can range widely, for example, sensitivity: 83% for cataract and 31% for colon polyps in NHANES.⁴ We hypothesize that reports for a severe childhood febrile illness are likely to be highly specific, but relatively insensitive. Such misclassification bias is likely to have reduced the power of our analyses. Methods to detect antibodies to viruses, for example, VirScan,⁵ would provide greater accuracy.

We are grateful to Mrs Stratton for flagging this important point regarding the strengths and weaknesses of analyses using large population studies.

Conflict of interest

The authors declare no conflict of interest.