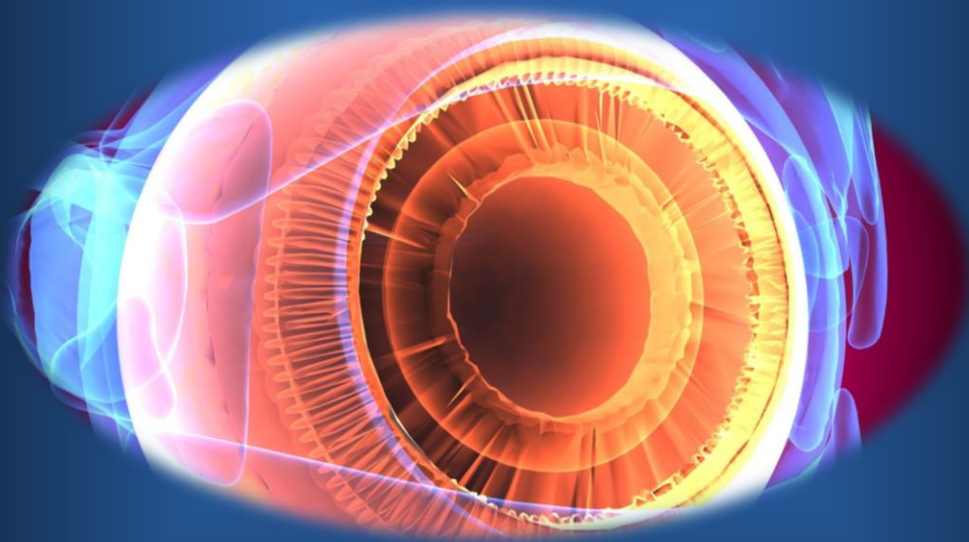


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Dear Doctor,

Greetings from Micro Labs Limited. We are happy to bring you '**Ophthalm Focus**' which contains latest and interesting news in the field of Ophthalmology.

This issue contains

- Psychological and Ocular Surface State of Ophthalmologists and Ophthalmic Nurses Working in COVID-19 environment
- Retinal detachment in retinitis pigmentosa
- Fluocinolone acetonide (ILUVIEN) implant in a cohort of previously treated patients with diabetic macular oedema: A 36-month follow-up clinical case series

Should you require any specific article or medical information, please feel free to contact us at medicalservices@microlabs.in

Looking forward to your valuable feedback

Best Regards,

Medical Team, Micro Labs Limited

Psychological and Ocular Surface State of Ophthalmologists and Ophthalmic Nurses Working in COVID-19 environment

Many health care workers are facing high-volume duty requirements, sleep deprivation, shortage of medical staff, shortage of COVID-19 testing, and

Ophthalmologists and ophthalmic nurses in COVID-19 environment experienced more anxiety and depression and reported greater ocular surface abnormalities

shortage of personal protective equipment, which can contribute to placing these medical staff under physical and mental stress. In turn, these stresses can lead to increased psychological burden, emotional depression and physical or mental fatigue. In addition, wearing goggles for long periods of time or irregular sleep or rest patterns also can contribute to the adverse health of staff, including to the ocular surface. To our knowledge, there is little research on the mental health and ocular surface health status of the frontline medical ophthalmic staff in Wuhan, China, prompting this investigation.

This study was conducted to characterize mental state and ocular surface state of ophthalmologists and ophthalmic nurses in Wuhan, China, and similar areas during the COVID-19 outbreak. This survey study assessed ophthalmologists and ophthalmic nurses in Wuhan, China, and Jiangxi, China, a province approximately 300 km south of Wuhan. The Hospital Anxiety and Depression Scale, the Van Dream Anxiety Scale, and the Ocular

Surface Disease Index were used to conduct questionnaire surveys via a messaging and social media app.

The main outcomes and measures were mean scores from the Hospital Anxiety and Depression Scale (0-10 points), the Van Dream Anxiety Scale (0-100 points), and the Ocular Surface Disease Index (0-100 points).

Of 126 individuals, there were 42 ophthalmologists (33.3%) and 21 ophthalmic nurses (16.7%) from Wuhan and 42 ophthalmologists (33.3%) and 21 nurses (16.7%) from Jiangxi. The mean (SD) age of ophthalmologists was 36.1 (7.6) years in Wuhan and 41.2 (8.8) years in Jiangxi. For ophthalmic nurses, the mean (SD) age was 35.2 (7.4) years in Wuhan and 33.4 (7.9) years in Jiangxi. The response rate for ophthalmologists was 90.3% (84 of 93) and for nurses was 91.3% (42 of 46).

The participation rate of ophthalmologists and nurses in Wuhan was 0.06% (42 of 70 000) and 0.07% (21 of 30 000), respectively; the participation rate in Jiangxi was 0.06% (42 of 70 000; 21 of 35 000) for both groups. In Wuhan, the mean (SD) Hospital Anxiety and Depression Scale (anxiety and depression were counted as separate scores), Van Dream Anxiety Scale, and the Ocular Surface Disease Index scores were 6.90 (2.30), 7.38 (2.19), 24.52 (5.86), and 43.90 (3.74), respectively, in ophthalmologists and 8.67 (3.04), 9.38 (2.64), 21.48 (6.15), and 40.05 (6.67), respectively, in ophthalmic nurses. In Jiangxi, these scores were 5.67 (2.89), 4.90 (3.15), 12.76 (7.27), and 38.79 (7.78), respectively, in ophthalmologists and 4.67 (3.20), 4.33 (3.23), 10.10 (7.62), and 41.52 (5.92), respectively, in ophthalmic nurses.

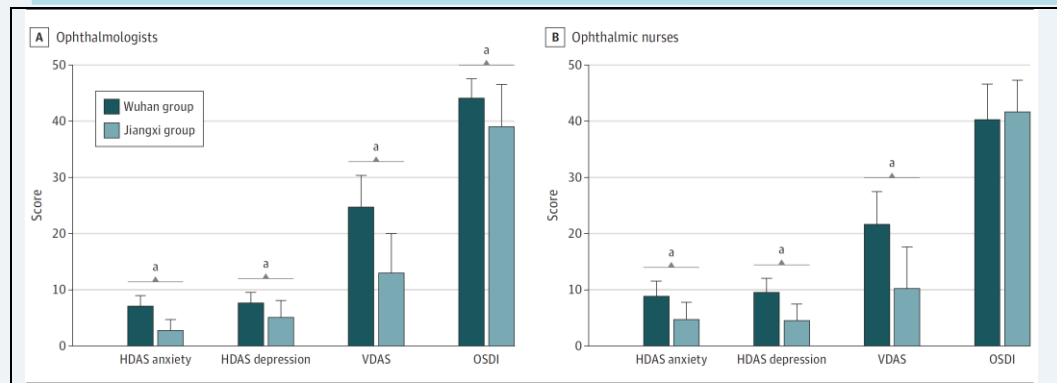


Figure 1. HADS, VDAS, and OSDI Scores Analysis

HADS indicates Hospital Anxiety and Depression Scale; OSDI, Ocular Surface Disease Index; VDAS, Van Dream Anxiety Scale. a There was significant difference between the scores of the 2 groups.

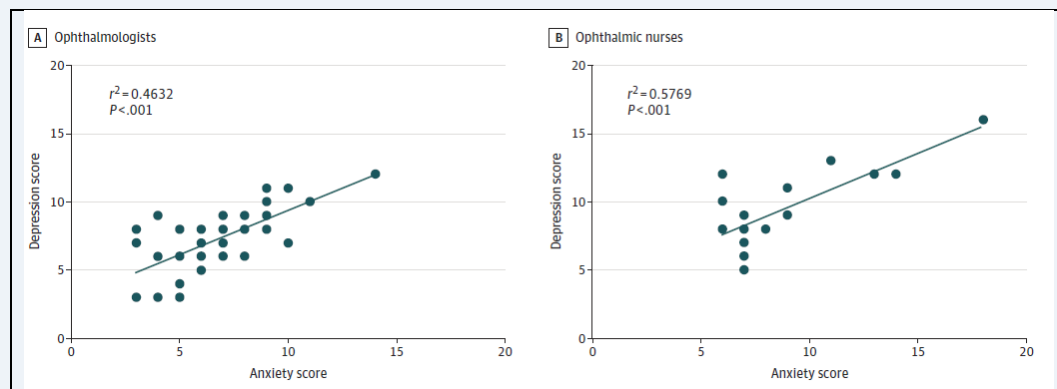


Figure 2. Correlation of Anxiety and Depression Scores

The difference (95% CI) between the 2 regions for these scores in ophthalmologists was 2.48 (95% CI, 1.30-3.65), 11.76 (95% CI, 8.90-14.63), 5.12 (95% CI, 2.45-7.79), and 5.12 (95% CI, 2.47-7.77), respectively, and in ophthalmic nurses was 4.16 (95% CI, 2.05-5.95), 5.05 (95% CI, 3.21-6.89), 11.38 (95% CI, 7.06-15.70), and -1.48 (95% CI, -5.41 to 2.25), respectively.

The study findings suggest that ophthalmologists and ophthalmic nurses in Wuhan experienced more anxiety and depression and reported greater

ocular surface abnormalities than similar individuals outside of Wuhan, but the wide CIs preclude concluding confidently that there were differences.

Source: Shao Y et al. JAMA Ophthalmol. 2020 July. [online ahead of print] doi:10.1001/jamaophthalmol.2020.2289

These results further support the effectiveness and safety of FAc implant in previously treated patients with persistent or recurrent DMO in a real-world clinical practice.

Retinal detachment in retinitis pigmentosa

Retinitis pigmentosa (RP) is rarely associated with retinal detachment (RPRD). The reported prevalence of retinal detachment ranges from 0.7% to 1.3%. The full spectrum of retinal complications is not well defined. This study was done to describe the types of retinal detachment in patients with retinitis pigmentosa and the surgical outcomes of RPRD.

This is a non-comparative, retrospective case series. An electronic database search was performed using Moorfields Open Eyes electronic health records. We identified 90 patients with RPRD between January 2000 and August 2017. Main outcome and measures are visual acuity (VA), surgical outcomes and classification of RPRD.

Of the 90 patients/detachments, 61 (67.8%) were rhegmatogenous retinal detachment (RRD), 19 (21.1%) were exudative, 3 (3.3%) were tractional retinal detachment (TRD) and 7 (7.8%) had combined. 37.5% (9/24) of

patients with exudative retinal detachment were treated with either cryotherapy or laser, and one patient underwent vitrectomy for vitreous haemorrhage. 56/90 patients underwent surgical intervention. Nine patients presented late and were deemed inoperable (two exudative and seven RRD). Of the RRD patients with full operative record, the primary attachment rate was 76.2% (16/21) and final reattachment rate was 85.7% (18/21) over a mean 15.4-year follow-up period. Mean VA for RRD surgery improved from 6/190 (1.51 logMAR) to 6/120 (1.31 logMAR) ($p=0.194$). In the TRD group, the mean VA was 6/300 (1.66 logMAR) at baseline and improved after surgery to 6/48 (0.90 logMAR) ($p=0.421$).

	Detached	Attached	Total
Segmental scleral buckle, retinopexy	0	3	3
Combined vitrectomy and buckle, retinopexy, gas	0	4	4
Vitrectomy with delamination, retinopexy, gas	0	1	1
360 encirclement with scleral buckle, retinopexy	0	1	1
Vitrectomy, retinopexy, gas	2	6	8
Vitrectomy, retinopexy, silicone oil	3	1	4
Total	5	16	21

Type of retinal detachment repair and respective outcome of reattachment

This study demonstrated a final reattachment rate of 85.7% with a trend toward better vision following intervention for patients with RPRD. However, the final long-term vision may be poor due to the natural progression of retinitis pigmentosa-associated macular degeneration.

These results further support the effectiveness and safety of FAc implant in previously treated patients with persistent or recurrent DMO in a real-world clinical practice.

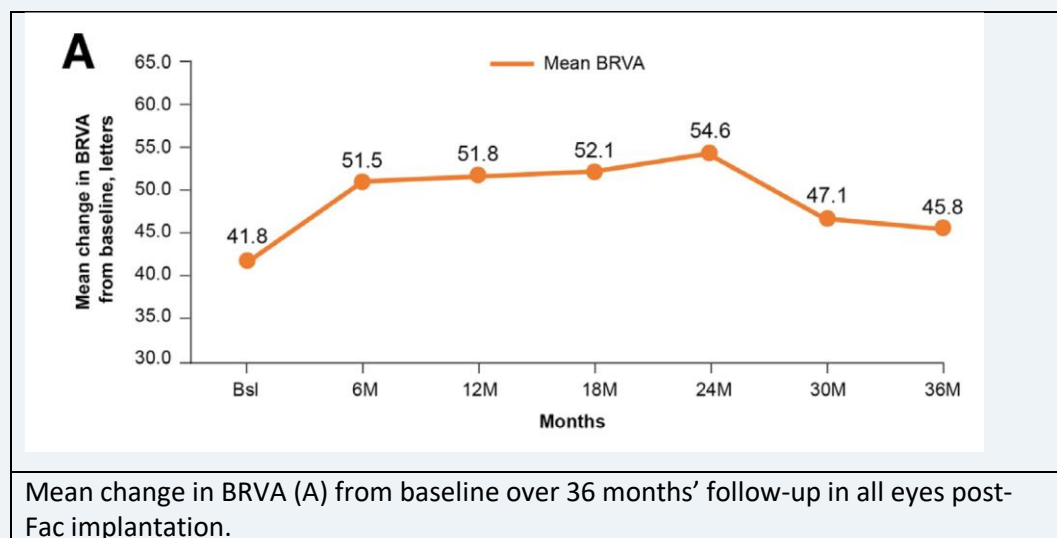
Fluocinolone acetonide (ILUVIEN) implant in a cohort of previously treated patients with diabetic macular oedema: A 36-month follow-up clinical case series

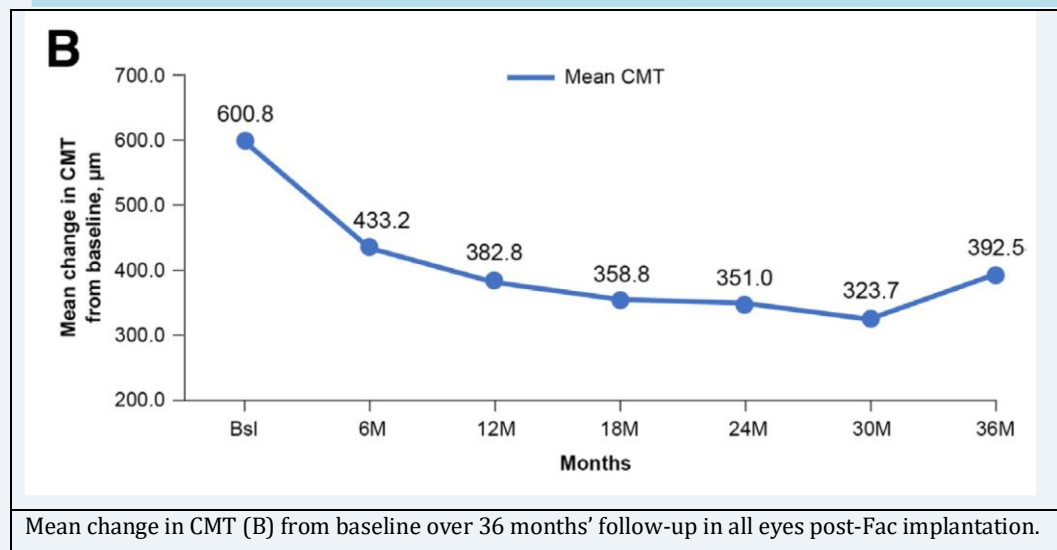
Diabetic macular oedema (DMO) is the most common visual complication of diabetes and diabetic retinopathy (DR) in working-age adults. This study was done to assess the real-world effectiveness and safety of single injection of a fluocinolone acetonide (FAc) implant in previously treated patients with recurrent diabetic macular oedema (DMO) over a 36-month follow-up period.

This is a retrospective study conducted at a single ophthalmology department at the Royal Hallamshire Hospital, Sheffield, UK. Data were collected using electronic medical records to identify all patients treated with a FAc implant for DMO between March 2014 and November 2014, followed with a 36-month clinic follow-up. Outcomes measured included

mean change in best-recorded visual acuity (BRVA) and central macular thickness (CMT) over the period of 36 months, treatment burden pre-implant and post-implant, and functional and anatomical responder rates.

Twenty-six eyes (n=22 patients) were treated with single intravitreal FAc implant followed with 36 months of follow-up. At 24 and 36 months, 86.4% and 75.0% of patients maintained or gained vision post-FAc implant in routine clinical practice. The mean BRVA increased from 41.8 to 54.6 letters at month 24 and 45.8 letters at month 36, with 50.0% and 33.3% of patients achieving a ≥ 15 letter improvement at months 24 and 36, respectively. The mean CMT reduced from 600.8 μm at baseline to 351.0 μm and 392.5 μm at months 24 and 36, respectively. Overall, a mean of one treatment every 13.33 months post-FAc implant (vs 3.24 months pre-FAc implant) was reported. Eleven eyes had an increased intraocular pressure of ≥ 10 mm Hg and 12 eyes had an increase to ≥ 25 mm Hg from baseline.





The Key findings include, a single FAc implant led to structural and functional improvements that lasted 3 years. Benefits included the stabilisation of visual acuity and a sustained reduction in retinal oedema, which were associated with a marked reduction in treatment burden (ie, fewer intravitreal treatments), in which additional treatment was required every 13.33 months as opposed to every 3.24 months pre-FAc implant. The clinical impact was a reduction in the number of hospital visits over 3 years, from a total of 570 visits prior to FAc implant to 462 visits post-FAc implant.

Sustained therapeutic benefits combined with fewer supplemental treatment injections and hospital visits help to reduce medication burden in patients with diabetic macular oedema and at an increased risk of eyesight loss. The FAc therapy may also help to reduce clinical appointment burden and help to make clinic visits more efficient and effective. Thus, these results further support the effectiveness and safety of FAc implant in previously treated patients with persistent or recurrent DMO in a real-world clinical practice.

Source: Ahmed M et al. BMJ Open Ophthalmol. 2020; 5(1): e000484.



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