Dorset Diabetic Eye Screening Programme

ROG ‘n’ roll stars

ROG graders can accurately refer from RDS to DS

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Back in the 90's……

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I'm a rock 'n' roll star

That didn’t quite work out..

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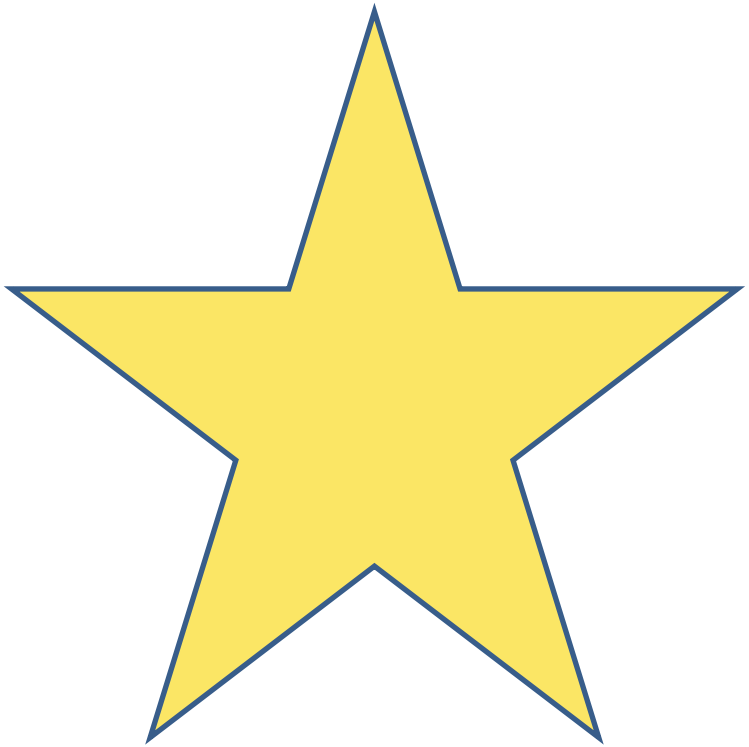
- Today I hope to convince you that ROG graders can be stars of diabetic eye screening
- And that I get through my presentation without the lights going out and water pouring through the ceiling….



Background

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- Dorset had been running an optometry based diabetic eye screening service since the 1980's
- Screeners have worked within the diabetes centres as part of the Joint Retinal Clinics (JRC) since 2004
- JRC – ophthalmologist, diabetologist, screener, podiatrist, diabetes nurse specialist and diabetes dietician
- Population growth and referrals to HES saw the introduction of the r-MDT incorporated into the JRC

R-MDT

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- Referral multi-disciplinary team meeting
- 1 hour before the JRC
- Ophthalmologist, diabetologist and screener
- ROG graders would have triaged the images prior to the meeting
- Review all patients deemed by the ROG graders to require referral or there was a question about their pathology status
- Offers excellent CPD for the ROG grading team

The protocol for ROG graders

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- We established a DS pathway before it became a national requirement

ROG graders would decide:

- All ungradable cases (UG)
- All SLB cases marked for referral – refer directly to HES
- Straight forward non DR lesions
- All R3S cases, outcome usually DS at 12 months
- DS cases that improve, remain stable or show minimal progression, outcome DS at 6 -12 months
- M1 graded cases due to dot / haemorrhage & VA $\leq$6/12 where it is clear the reduced VA is due to a non DR problem, grade as M0 with reduced VA
- Newly detected M1 cases due to dot / haemorrhage & VA $\leq$6/12, outcome usually DS at 6 months
- Newly detected M1 cases due to minimal lesions, outcome usually DS at 6 months
- Newly detected R2 cases due to minimal R2 features, outcome usually DS at 6 months

Caveats

- Notes about newly detected M1 and R2 patients
- M1 with normal or unchanged VA due to tiny patch of exudate, a group of exudates remote from fovea or a small number of dots or haemorrhages, can be allocated to DS in 6 months in the first instance
- R2 cases due to MBH or venous beading or reduplication with no IRMA, can be allocated to DS in 6 months in the first instance
- In general apart from pregnant women, if you think DS at 3 months is the correct outcome, the patient should probably be sent to R-MDT for ophthalmology review

Patients sent to r-MDT

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Patients in the ROG list will be referred to the weekly ophthalmology MDTs for the following reasons:

- newly detected referable retinopathy R3A
- significant lesions in M1
- extensive R2M0
- significant worsening of diabetic retinopathy (DR) in DS patients
- non DR lesions needing an ophthalmology opinion
- all cases where there is uncertainty about DR or outcome

The study

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Aim

- To establish if the 2015/2016 current 4 ROG graders could safely refer RDS patients to DS.

Method

- A report was run for all patients with a DS from RDS outcome who were reviewed at ROG by ROG graders.
- The subsequent visit outcome was checked to establish if patient DR status improved, remained stable or declined resulting in referral to Hospital Eye Service (HES.)
- Those patients with a referral to HES were mixed with improved/stable patients, to remove bias, and rereviewed by 3 ophthalmologists.
- 20 images sets per ophthalmologist, 5 in each were the referred to HES patients, 15 were stable/improved.
- They were required to grade and decide the outcome.

Results

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- 602 patients were referred from RDS to DS, 503 (83.5%) reviewed by 6 ROG graders and 99 (16.5%) reviewed by ophthalmologist.
- 392 (80%) of the 503 patients were reviewed by the current 4 ROG graders (2 had retired)
- Of those 392 at the subsequent DS visit:
  15 (3.8%) were referred to HES
  20 (5.1%) died
  52 (13.2%) DNA
  144 (36.7%) remained in DS
  2 (0.5%) excluded
  1 (0.25%) referred to HES for non-DR
  5 (1.3%) moved away
  18 (4.6%) weren't due
  130 (33.2%) returned to RDS
- 15 patients subsequently referred to HES were rereviewed by 3 ophthalmologists:
  8 (53.3%) referred to DS
  2 (13.3%) returned to RDS
  5 (33.3%) were referred to HES
- The grade agreement rate between high level graders and ophthalmologists was 86.7% and outcome agreement rate was 26.7% (this included difference in DS timeframe.)

Conclusion

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- The Dorset ROG graders had weekly review sessions with the ophthalmologists enabling them grade accurately and determine safe outcomes for patients.
- ROG graders accurately referred 96.2% of patients from RDS to DS.
- Partnership between HES and DDESP is essential to target those patients requiring referral for treatment and those who require DS surveillance.
- It reduces patient anxiety and HES appointments due to the reduction of inappropriate referrals.
- Further investigation into the 15 referred patients is planned.
- A DS to DS study is also warranted.

Thank you

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Band

- Sandra Van Zanten
- Nichola Ross
- Jane Fuller
- Jackie Lambeth

Tour managers

- Non Matthews
- Steven Rowley
- Owen Anderson

It’s just ROG ‘n’ roll