Multi-Disciplinary Management of Patients with STDR

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STDR?

- A significant proportion of patients who are referred from the DRSS to the HES
- R2/R3/M1

Who gets STDR?

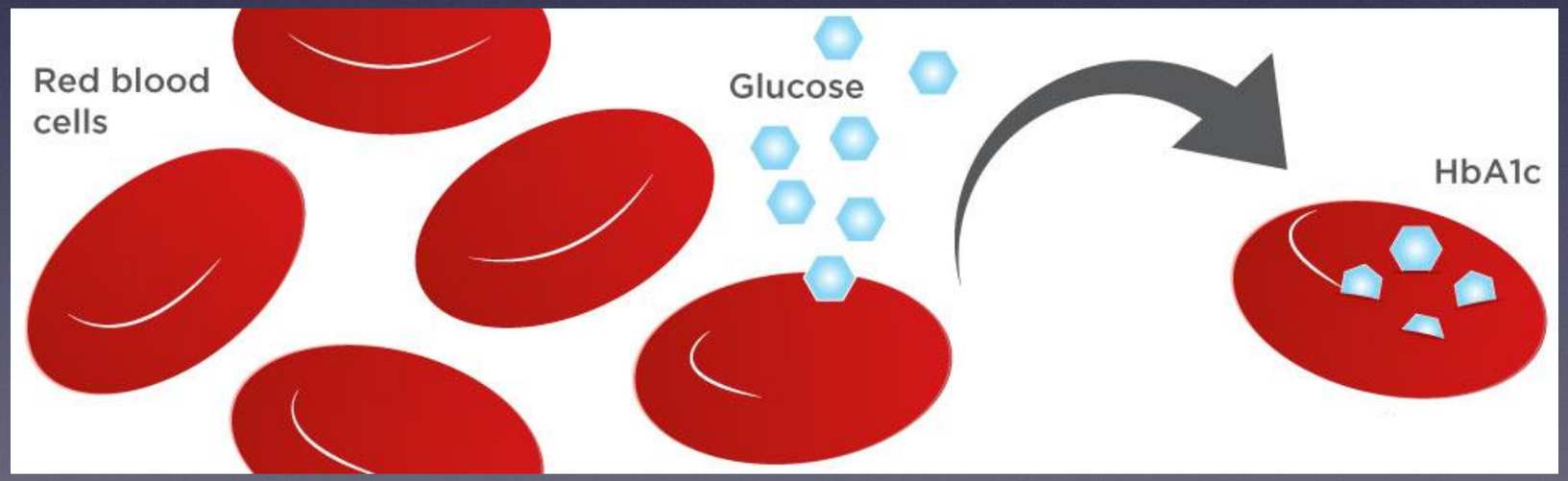
- Duration of diabetes
- Glycaemic control
- Systolic blood pressure
- Male gender

Glycaemic control

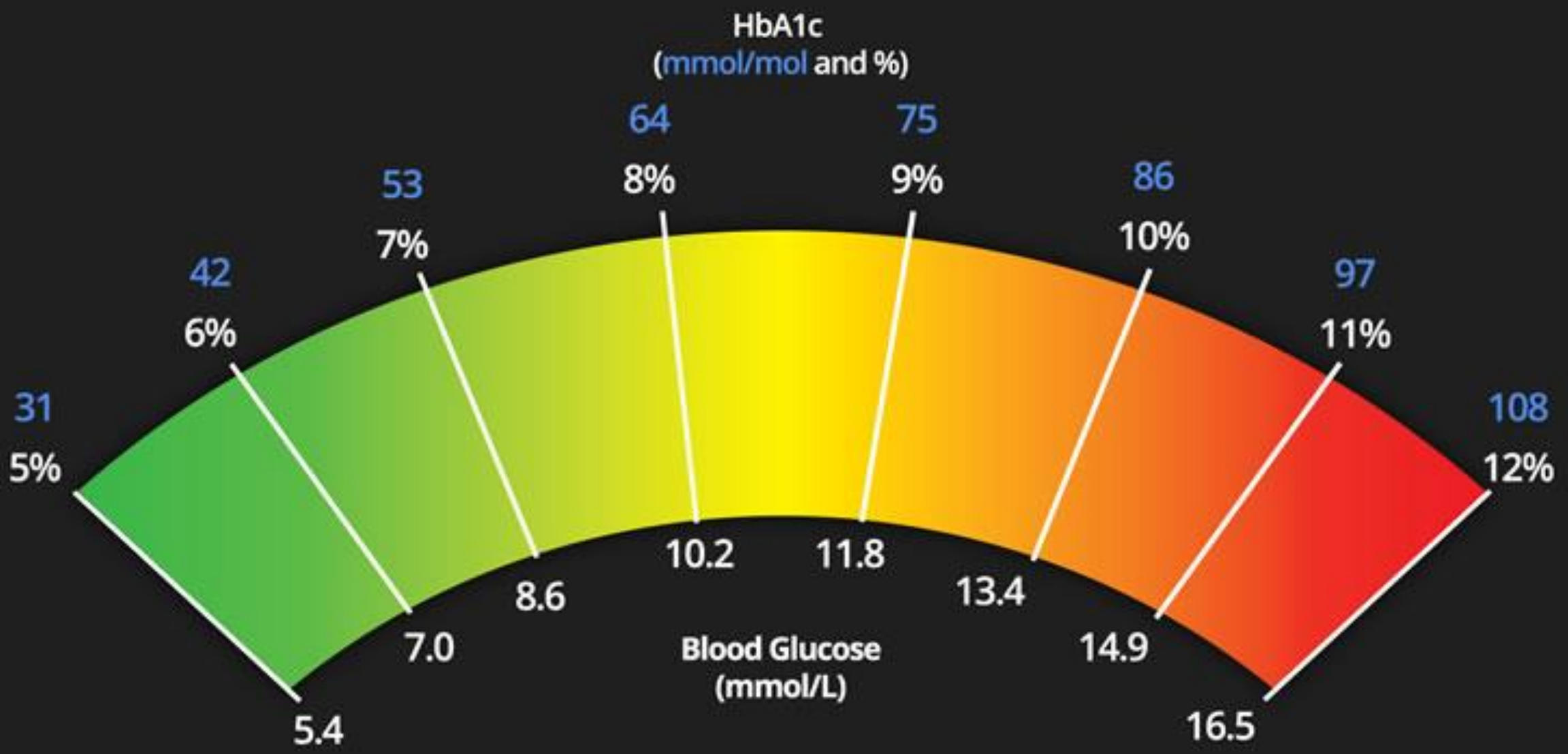
- Blood sugar
- HbA1c
- Do patients know how good their control is?
- Do patients understand the difference between HbA1c and one-off blood glucose readings?

What is HbA1c?

- Longer term measure of glycaemic control
- Representative of previous 3 months of glycaemic control (lifespan of RBC)



HbA1c as an indicator of Diabetes Control



Diabetes.co.uk
the global diabetes community

unite for diabetes

Nathan et al. Translating the A1C Assay into Estimated Average Glucose Values. Diabetes Care 2008; 31:1473-1478
Christchurch Diabetes Centre 2009

How often do patients with STDR have their HbA1c measured?

- **Diabetic population may not engage optimally with screening programmes**

- In our population of focus, HbA1c should be monitored at least every 3-6 months

- In Swindon more than 1/3rd of patients with STDR had their HbA1c last measured more than 6 months ago

Blood pressure

- Do many patients known / measure their own blood pressure?
- Target BP in diabetic patients is 130/80 in patients with diabetes and diabetic retinopathy

Who should be involved with the care of our patients?

- Patient
- DRSS
- HES
- GP’s
- Diabetes specialist nurses
- Diabetologists

What can we do about it?

6.6 OPHTHALMOLOGIST AND MANAGEMENT OF DIABETES

In the UK, most patients have their diabetes care in a primary medical or nursing setting so the ophthalmologist often provides the first specialist consultation. Ophthalmologists have an important role in the management of diabetic patient since retinopathy heralds a significant stage of diabetes with evidence of microangiopathy.

- Systems can be set up (see later) to provide enhanced care for diabetic patients in eye clinics. For example in addition to visual acuity and ocular assessments, blood pressure measurements and survey of other diabetes related care and outcomes can be performed routinely. (**Level B**)

- The ophthalmologists can take the opportunity to ensure appropriate care and medical targets are being pursued. A number of simple, key questions (table) may help determine whether patients have been lost to regular supervision or whether more specialised diabetes interventions are required. The same principles also apply to on-going follow-up of patients in the hospital eye service, especially if laser therapy or intravitreal injection therapy is being considered.

Medical questions for patients with diabetic retinopathy

1. Who helps you to look after your diabetes?

General practitioner

Specialist diabetes nurse in community/GP surgery

in hospital or diabetes centre

Diabetes specialist

2. When is your next appointment?

3. What is your long-range diabetes test result?

glycated haemoglobin (HbA1c) or fructosamine

when was the last test done?

3. What is your usual blood pressure? How often it is checked?

measured at home

measured in surgery or clinic

4. Do you know what your blood cholesterol level is?

5. What is your current treatment?

Diabetes

Blood pressure

Cholesterol

6. Does your current treatment include any of the following?

pioglitazone (Actos) aspirin

ramipril or sartan family of drugs warfarin

fenofibrat

Involvement of secondary care

- Resource rationing
- Patient compliance
- Identifying a suitable population
- **Requires close links with your diabetes colleagues**

Type 1 diabetes – These patients should ideally be under the care of a diabetologist life-long, irrespective of the presence of sight threatening diabetic retinopathy (STDR). Please refer all patients if not currently under the care of the local diabetes team.

Type 2 diabetes – These patients should generally be under the care of a diabetologist if they have confirmed sight threatening diabetic retinopathy. This term encompasses the following conditions:

1) Severe non-proliferative diabetic retinopathy (R2)
2) Active proliferative diabetic retinopathy (R3)
3) Clinically significant macular oedema (CSMO)

Pioglitazone, a drug used to reduce insulin resistance is particularly associated with diabetic macular oedema. A comprehensive drug history should be sought in type 2 diabetics found to have DME. **Patients on Pioglitazone with CSMO should be referred urgently so that an alternative agent can be prescribed.**

Obtaining information regarding the patient's glycaemic control and modifiable risk factors may also aid in the decision making process when considering referral to the diabetologist. The following targets are sought in diabetic patients:

- BP < 130/80
- HbA1c < 48 patients treated with diet or metformin or < 58 in all others
- The patient to be on a statin if they have type 2 diabetes, if they have had type 1 diabetes for greater than 10 years or if they have microalbuminuria with retinopathy
- Smoking cessation

Optimizing Medical Management in Patients with Sight-Threatening Diabetic Retinopathy.

Mamtora S[1], Sandinha T[2], Carey PE[3], Steel DHW[4].

Author information

Abstract

INTRODUCTION: Diabetic retinopathy is a leading cause of blindness in adults of working age. Patients with sight-threatening diabetic retinopathy (STDR) often have poor control of modifiable risk factors, including blood pressure and blood glucose. Patients in our eye department with STDR whose diabetes was managed only by their general practitioner (GP) were referred to a diabetes specialist. We have reviewed these referrals and assessed the control of modifiable risk factors in these patients at the time of referral.

METHODS: A retrospective study was performed which identified 54 patients with STDR who had been referred from our eye department to a diabetes specialist between May 2013 and August 2014. Patient demographics, grades of retinopathy, glycated hemoglobin (HbA1c) levels, blood pressure, and lipid profiles were noted from the initial clinic visit and the first clinic appointment after 12 months. Initial management and any subsequent changes to management were recorded.

RESULTS: Of the 54 patients initially referred to the dedicated diabetic retinopathy clinic, data from 32 patients were available for analysis; 22 patients failed to attend the clinic. The majority of patients who presented to the clinic were found to have inadequate control of modifiable risk factors. At the initial clinic visit, nine of the 32 (28%) patients had a blood pressure that was less than the target of 130/80 mmHg and only two (6%) had a HbA1c level of less than the target of 48 mmol/L for type 2 diabetes and 58 mmol/L for type 1 diabetes, respectively. Changes were made to the management in 24 (75%) of the patients. Blood pressure management was changed in 18 (56%) patients. Overall, changes were made to blood pressure management and lipid and glycemic medication, including insulin.

CONCLUSION: The majority of patients with STDR were receiving suboptimal medical management. Collaboration between GPs, diabetes specialists, and ophthalmologists can lead to optimized medical management. All eye departments should develop protocols specifying when patients with diabetic retinopathy should be referred for to a diabetes specialist for input.

KEYWORDS: Blood pressure; Diabetes; Diabetic retinopathy; Maculopathy; Multidisciplinary; Systemic control

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The Great Western Way

- Swindon approach
- Point of care HbA1c measurement and Blood Pressure measurement as required **with patient education**
- Direct onwards referral to Consultant Diabetologist

What can you do?

- Ask as much as you can
- Type of Diabetes
- Duration of Diabetes
- Current treatments for blood sugar / blood pressure including insulin usage
- Previous laser/vitrectomy
- Knowledge of HbA1c/blood pressure
- Who manages their diabetes? GP vs. Diabetes Specialist (vs. nobody!)

Questions?

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