



## ASK THE OPTOMETRIST

**ASK THE OPTOMETRIST** IS A SERIES OF INFORMATION NEWSLETTERS THAT WE ARE PLEASED TO PROVIDE OUR PATIENTS TO ELABORATE ON A VARIETY OF RELEVANT EYECARE TOPICS.

### DIABETIC EYE DISEASE

#### **Q1: WHAT IS DIABETES, AND HOW DOES IT AFFECT THE EYE?**

DIABETES IS A DISEASE THAT PREVENTS YOUR BODY FROM MAKING OR EFFECTIVELY USING INSULIN, WHICH, IN TURN, LEADS TO INCREASED LEVELS OF GLUCOSE (SUGAR) IN THE BLOOD. THE ELEVATED GLUCOSE LEVELS DAMAGE THE DELICATE LINING OF THE BLOOD VESSELS, CAUSING SWELLING, BLEEDING, AND POOR SUPPLY OF OXYGEN AND NUTRIENTS TO VITAL ORGANS LIKE THE HEART, KIDNEYS, LIVER, BRAIN, AND EYE – A CONDITION KNOWN AS DIABETIC RETINOPATHY.

#### **Q2: WHAT ARE THE VISUAL SYMPTOMS OF DIABETES?**

WHILE DIABETIC EYE DISEASE OFTEN PRESENTS WITH NO SYMPTOMS, SOME PATIENTS EXPERIENCE FLUCTUATIONS OF VISION DUE TO CHANGING GLUCOSE LEVELS WITHIN THE TISSUES OF THE EYE. SHOULD RETINOPATHY DEVELOP, AND PROGRESS WITHOUT DETECTION AND TREATMENT, THE RESULTS CAN BE DEVASTATING – IN FACT, DIABETES IS ONE OF THE LEADING CAUSES OF PREVENTABLE BLINDNESS IN NORTH AMERICA, A TREND THAT SHOWS NO SIGN OF CHANGING. BETWEEN 1995 AND 2005, THE NUMBER OF ONTARIANS WITH DIABETES INCREASED BY NEARLY 70% – AND DOUBLED IN THE POPULATION UNDER AGE 40.

**Q3: HOW WILL MY OPTOMETRIST HELP CARE FOR MY DIABETES?**

THE CANADIAN DIABETES ASSOCIATION (CDA) RECOMMENDS ANNUAL EYE EXAMINATIONS FOR ANYONE DIAGNOSED WITH DIABETES, WHETHER TYPE I OR II, WHETHER TREATED WITH INSULIN, ORAL MEDICATIONS, OR DIET AND EXERCISE. FURTHER, **OHIP** INSURES EXAMINATIONS EVERY YEAR FOR ALL PATIENTS WITH DIABETES, REGARDLESS OF AGE. THE MOST CRITICAL COMPONENT OF THESE ASSESSMENTS IS THE DILATED RETINAL EXAMINATION, WHERE EYE DROPS ARE USED TO ENLARGE THE PUPIL AND PROVIDE YOUR OPTOMETRIST WITH A CLEAR VIEW OF THE RETINAL TISSUES.

**Q4: WHAT CAN BE DONE IF I HAVE DIABETIC RETINOPATHY?**

AS WITH MOST DISEASES, THE BEST TREATMENT IS PREVENTION. KEEP YOUR BLOOD GLUCOSE UNDER TIGHT CONTROL – MONITOR YOUR SUGAR LEVELS REGULARLY, AND AIM FOR STEADY READINGS IN THE TARGET RANGE SUGGESTED BY YOUR FAMILY PHYSICIAN. THE A1C LABORATORY TEST PROVIDES AN OVERALL PICTURE OF DIABETES CONTROL, AND SHOULD BE 7% OR LOWER FOR PATIENTS WITH DIABETES. CONTROL OF BLOOD PRESSURE AND CHOLESTEROL IS CRITICAL, AND ‘BORDERLINE’ LEVELS MAY BE AGGRESSIVELY TREATED IN AN ATTEMPT TO REDUCE THE RATE AND RISK OF COMPLICATIONS.

SHOULD RETINOPATHY DEVELOP, EARLY DETECTION IS CRITICAL – YOUR OPTOMETRIST MAY REFER YOU TO AN OPHTHALMOLOGIST FOR LASER OR MEDICAL THERAPY TO TREAT LEAKING BLOOD VESSELS BEFORE PERMANENT DAMAGE TO THE RETINA OCCURS.