practice **pearls**

Sixteen diseases not to miss in the office

Early discovery and effective treatment of the 16 conditions highlighted here can save lives, reduce suffering, and keep us out of court.

n the daily routine of primary care there are several conditions that have significantly reduced morbidity and mortality if they are diagnosed early. The volume of information that crosses our desks daily makes it difficult to keep these diseases in clear focus.

1) Non-valvular atrial fibrillation

Undiagnosed and untreated atrial fibrillation has an associated 6% annual rate of stroke, 20% of which are fatal. Treatment with warfarin to an INR between 2 and 3 reduces this risk by 68% per year.

2) Diabetes mellitus

Undiagnosed and untreated diabetes (type 2 being by far the most common) inevitably results in significant cardiovascular, ocular, neurological, and renal complications. Treatment with glycemic control, ASA, ACE inhibitors, and statins dramatically reduces the associated severe morbidity and mortality.

3) Hypertension

Undiagnosed and untreated hypertension inevitably results in significant cardiovascular, neurological, and renal complications. Treatment with ACE inhibitors, diuretics, calcium channel blockers, and beta-blockers, dramatically reduces the associated morbidity and mortality.

4) Ulcerative colitis

Ulcerative colitis is associated with a 5% annual incidence of cancer of the colon. Confirming the diagnosis on pathology is critical to assigning the

patient to a high-risk category. Diagnostic colonoscopy initially and on a 5-year term virtually eliminates the risk of death from colon cancer. Air contrast barium enema is my preferred diagnostic test because of cost and availability. Colonoscopy has a 97% detection rate, barium enema has an 86% detection rate, and stool for occult blood has a 41% detection rate.

5) Prostate cancer

Detecting and diagnosing prostate cancer in men between the ages of 40 and 60 can result in a cure for this aggressive malignancy. Annual digital rectal examination and PSA determination will diagnose the vast majority of these cancers in the curative stage. Follow-up with free PSA and then ultrasound-guided prostate biopsy clinches the diagnosis.

6) Hypercholesterolemia

Undiagnosed and untreated elevated cholesterol and/or triglycerides results in significant cardiovascular complications. The death rate for a first myocardial infarction can be as high as 30%. Treatment of this condition with statins, fibrates; or bile acid sequesterants dramatically reduces mobility and mortality.

7) Acute myocardial infarction

Any patient presenting to the office with unstable angina or preinfarction angina or myocardial infarction needs treatment and intensive supervision. Immediate transfer to an emergency department is necessary. The death rate and infarction size can be dramatically reduced by aggressive treatment.

8) Congestive heart failure

Left ventricular failure secondary to coronary artery disease and/or prior myocardial infarction has an extremely poor prognosis (50% 5-year survival) unless detected and treated. Treatment with ASA, ACE inhibitors, beta-blockers, and spironolactone dramatically reduces morbidity and mortality.

9) Epilepsy

An undiagnosed seizure disorder can cause death or severe injury if the seizure occurs while the patient is driving, bathing, swimming, or in some other precarious situation. Advice, treatment, and withdrawal of driving dramatically reduce these risks.

10) Breast cancer

Breast cancer is a common and serious malignancy of women (9% to 11% lifetime risk) that causes very significant morbidity and mortality. Early diagnosis and treatment with mastectomy can result in cure. Annual breast examination and mammography for all women between the ages of 40 and 60 can result in a significantly increased cure rate.

11) Malignant melanoma

This relatively uncommon but extremely serious form of cutaneous malignancy is most common in patients in the 40 to 60 year age group. Excisional biopsy with pathological evaluation often results in cure. An absence of treatment may result in death within 5 years. If you are not sure that the cutaneous lesion or spot is benign, remove it and send it for pathological analysis.

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12) Acute lymphocytic leukemia

This condition is rare but easily diagnosed with a CBC. It is considered a medical emergency and generally treatment is initiated within 24 hours of diagnosis.

13) Asthma

Sudden death occurs in patients with asthma who are overusing rapid acting beta-agonists. Detecting this overuse and initiating more effective treatment with inhaled corticosteroids, oral corticosteroids, antibiotics, and long-acting beta-agonists will save lives.

14) Bacterial vaginitis/ cervicitis and acute pelvic inflammatory disease

Untreated PID can result in pelvic abscesses and permanent infertility. Early diagnosis and effective empiric treatment can prevent these unfortunate outcomes.

15) Acute appendicitis

This condition is generally easy to diagnose (RLQ pain and tenderness) and surgical treatment offers rapid cure. There is significant potential morbidity and mortality if missed.

16) Ectopic pregnancy

The combination of a late or missed period, vaginal spotting or bleeding, and abdominal pain is an ectopic pregnancy until proven otherwise. Undiagnosed this condition can cause death. Pelvic tenderness, a positive pregnancy test, and/or an urgent pelvic ultrasound or CT scan make the diagnosis.

> -Ian L. Mitchell, MD Delta

Children to learn about healthy living from fellow students

Healthy Buddies, an initiative of BC Children's Hospital, is a child-centred health promotion program targeting attitudes and behaviors about body image, nutrition, and physical activity. Elementary schools across BC will soon be asked to participate in this program that incorporates the use of buddy teaching between intermediate and primary students. The program is a way for children to come together to learn about healthy living from one another at school, a natural place for this type of teaching and learning to occur.

Healthy Buddies was originally conducted as a pilot study on the Sunshine Coast from 2002 to 2004, which resulted in significant improvements in students' health, such as an overall reduction in BMI and blood pressure.

Medical writing prize: \$1000

for best student article

The J.H. MacDermot Prize for Excellence in Medical Journalism comes with a cash award of \$1000 for the best article on any medicine-related topic submitted to the BC Medical Journal by a medical student in British Columbia.

The British Columbia Medical Association awards the annual prize to the finest medical student manuscript received by the BC Medical Journal that year. The prize honors Dr John Henry MacDermot (1883-1969), who became the editor of the Vancouver Medical Bulletin at its formation in 1924, remaining at the helm until 1959, when it became the BC Medical Journal. He was editor of the BCMJ until he retired in 1967. Dr MacDermot was also past president of both the VMA and the BCMA.

Based on this success, the program is now expanding into schools in various regions across the province.

The 21-week buddy program comprises three health themes: "Move Your Body," "Fuel Your Body," and "Love Your Body." In the first half of the year, students learn how to be positive buddies and learn about these three components critical to a healthy life. In the second half of the year, students learn to identify the challenges to living a healthy life and learn strategies to overcome these challenges, increasing the likelihood of healthy living success. Health concerns, such as obesity and eating disorders, are also addressed in the program.

Older students first receive direct instruction. Then, with guidance from teachers, they support the learning of their younger buddies. Throughout Healthy Buddies students deliver presentations, practise relaxation techniques, interview each other, play card games, and create art displays. Classrooms receive comprehensive resource bins containing all lesson materials, games, videos, CDs, and posters. In addition to classroom lessons, there is a physical activity component of Healthy Buddies known as Fitness Loops. Students meet with their buddies twice weekly in the gym to participate in structured activities designed improve to strength, flexibility, and endurance.

The Provincial Health Services Authority has provided funding in support of this prevention and health promotion program for 3 years, totaling more than \$837000. Dr Sue Stock is co-founder of the program and a physician with the endocrine and diabetes clinic at Children's. To learn more about the Healthy Buddies program, email info@healthybuddies.ca or visit www.healthybuddies.ca.