

DEPARTMENT OF FAMILY MEDICINE

RESIDENT PROJECTS

June 4, 2008



SECTION A (Purple) = Agenda for Presentations in Shuttleworth

SECTION B (Blue) = Agenda for Presentations in Room 1 & 2

SECTION C (Green) = Agenda Posters in D-1 171 & 173

SECTION A

PRESENTATIONS – SHUTTLEWORTH

TIME	PRESENTER	PRESENTATION
08:30	Coffee, Refreshments - Outside Room D1-171 and D1-173, Poster Displays	
08:50	Dr. Stephen Wetmore	Opening Remarks in Shuttleworth
09:00	Hernan Boniolo	Vitamin B12 Status of Patients on Metformin in an Academic Family Medicine Practice in SW Ontario
09:15	Sharadindu Rai	Outcomes of the Annual Physical Examination
09:30	Betty Lee	Family Medicine After-hours Telephone Service: Evaluating Utility, Effectiveness and Patient Satisfaction
09:45	Alexandra Yudin	Use of Verbal Fluency as a Screening Test for Memory Impairment
10:00	Stephen Keleher	Palliative Care in a Young Adult Patient with Adrenocortical Carcinoma: A Case Report
10:15	Dorota Marczuk	Case of 59 Year Old Female with Vulvar Itching
10:30	Coffee, Refreshments -Outside Room D1-171 and D1-173, Poster Displays	
10:45		
11:00	Sunil Mehta	The Case of Mr. G: An Illustration of Malingering
11:15	Carol Mills	Pediatric Recurrent Abdominal Pain: A Case Report of Parasitic Infection
11:30	Monica Nijhawan	Selective Mutism: A Case Report
11:45	Angela Novena	Female Genital Mutilation: A Case Study
12:00	Christie Perry	Esophageal Adenocarcinoma in a Young, Obese Female Smoker: A Case Report
12:15	Lunch - Livingston Lounge	
12:30		
12:45		
13:00		
13:15	Matthew Shaw	Portal Vein Thrombosis Secondary to Factor V Leiden: A Case Report
13:30	Ghazala Sultan	Acute Pain Crisis
13:45	Christel Tayag	More Than Just a Bug Bite
14:00	Erica Van Daalen	Acute Management of Hand and Upper Limb Fractures: A Teaching Manual
14:15	Poster Displays - Rooms D1-171 and D1-173	
14:30		
14:45		
15:00		
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16:00		

Vitamin B12 status of patients on metformin in an academic family medicine practice in SW Ontario

Dr. Hernan Boniolo

Vitamin B12 deficiency is a common cause of macrocytic anemia and has been implicated in a spectrum of neuropsychiatric disorders ranging from peripheral neuropathy and dementia to depression and personality changes, even cardiac disease can be triggered by cobalamin deficiency.

There are several studies that have shown that long-term therapy with metformin is associated with decreased levels of vitamin B12. Studies have also shown that measurements of metabolites such as methylmalonic acid and homocysteine are more sensitive in the diagnosis of vitamin B12 deficiency than measurements of serum B12 levels alone, specially on those patients with vitamin B12 levels between 100 and 400pg/mL.

We have decided to conduct a study in which the participants will be tested one time only for serum B12 levels and folate. Patients with low folate will be excluded from the study. Patients with B12 levels less than 100pg/mL will be considered automatically B12 deficient and those with levels higher than 400pg/mL will be considered not deficient. Those patients with levels between 100 - 400pg/mL will be tested for serum methylmalonic acid levels and serum homocysteine levels. If these two levels are elevated B12 deficiency will be confirmed.

With the results of this study we hope to show that patients undergoing treatment with metformin in our clinic have an underlying vitamin B12 deficiency that has gone undiagnosed. We also hope to prove that the measurements of methylmalonic acid and homocysteine levels are needed in order to properly assess vitamin B12 deficiency.

Outcomes of the Annual Physical Examination

Dr. Sharadindu Rai

Early Canadian Task Force on Preventive Health Care recommendations (1979) stated the annual physical examination (APE) should be abolished. This study evaluated whether selected physical exam and laboratory components were more likely to be completed within the context of an APE than at random patient visits over the course of a year, whether components were more likely to yield positive results if done within the APE, and whether they had an impact on the number of chronic patient problems.

Methods: This descriptive, quantitative, retrospective chart review divided an SRS of 1000 patients at SJFMC, London, Ontario into two groups: those who had an APE in 1998 and those who did not. Statistical tests were applied to selected components. Patients' descriptive data (age, as well as height and weight when available) were also recorded.

Results: Cardiac, respiratory, abdominal, and pelvic examination were more likely to be performed within the context of an APE than without ($p < 0.001$, Chi Statistic). Most of these components also had significance or borderline significance for being more likely to have positive results outside the context of the APE. 0.69% of adults age 50 or over had FOBT. Most laboratory components did not reach significance. Patients with APE had significantly lower BMI (25) than those who did not (26). The APE had no impact on chronic patient concerns.

Conclusions: The APE was more likely to result in physical examination maneuvers of unproven benefit than the average patient visit, had no impact on chronic patient concerns, and had no impact on the delivery of FOBT.

Family Medicine After-hours Telephone Service: Evaluating Utility, Effectiveness and Patient Satisfaction

Dr. Betty Lee

Background: There is an increasing emphasis on the use of after-hours call services in family medicine to provide more comprehensive care to patients. Another presumed benefit of telephone medicine is the potential reduction of inappropriate ER visits. Sunnybrook Family Medicine Department has offered after-hours telephone medicine for over 35 years; however, its benefits have not yet been fully evaluated.

Objective: Our goals were to assess, with respect to our after-hours telephone service: (1) volume and seriousness of calls received (2) if unnecessary ER visits are reduced and (3) determine patients' satisfaction.

Methods: Family practice residents recorded all patient-initiated after-hours telephone contacts between January to March 2008 and completed a resident survey for each of the calls. Study personnel then telephoned the patients within 1-2 weeks of their call for completion of a patient survey. Data collected assessed the patients' reasons for calling, seriousness of conditions, preventable ER or office visits and satisfaction with the service.

Results: A total of 72 patient call records with 72 resident surveys were submitted. Of those records, 57 patient surveys were completed. It is estimated that our service prevented 17 unnecessary emergency room visits. Patient satisfaction was high. The most common reasons for calls were gastrointestinal and musculoskeletal complaints. There was a moderate correlation between the perceived urgency of the conditions from the opinions of the residents and the patients.

Conclusions: The majority of usage occurred over the weekend. The after-hours telephone service was well received by patients and prevented unnecessary emergency room visits.

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Use of Verbal Fluency as a Screening Test for Memory Impairment

Dr. Alexandra Yudin

Purpose: To determine the usefulness of Verbal Fluency Testing as a screening tool for memory impairment in patients older than 65 years of age.

Objective: To identify the percentage of patients over 65 years of age who failed a Verbal Fluency Test and were found to have significant memory impairment upon further cognitive testing and clinical assessment.

Methodology: Type of study design: Patient Chart Audit.

We audited 400 charts of patients age 65 or over who had been seen in the last 18 months on Dr Jordan's team at the Byron Family Medical Centre. Initially, we determined how many patients over age 65 years of age were offered the screening test (Verbal Fluency). Secondly, how many of those tested were screen-positive. Finally, we determined how many of all screen-positive patients went on to have a detailed cognitive assessment and how many of those were found to have significant memory impairment.

Results: Out of 80 patients who had an abnormal Verbal Fluency test 63.8% (51) were diagnosed with Normal Aging, 6.3% (5) with Dementia, 15 % (12) with Mild Cognitive Impairment and 15 % (12) with Memory Impairment not yet diagnosed. The sensitivity of the Verbal Fluency Test was 68%, and the specificity was 71%.

Recall that the term "Normal Aging" in our study was used to identify the group of patients that had no evidence of cognitive compromise. It did not refer to their general state of health.

Conclusion: The Verbal fluency test appears to be a simple and useful test to screen geriatric population for memory impairment.

However, if cognitive compromise is suspected it is probably better to proceed with more detailed testing even though it is time-consuming.

Palliative Care in a Young Adult Patient with Adrenocortical Carcinoma: A Case Report

Dr. Stephen Keleher

Palliative Care is the endpoint of a continuum of care from birth to death. Managing pain and other symptoms, helping patients and their families/caregivers determine goals of care, and providing psychological, emotional, and spiritual support are all equally valued. Through a case presentation, the unique challenges of providing palliative care to a young adult patient with adrenocortical carcinoma are highlighted. Absence from work and study, interrupted plans for vocation and relationships, decreased self-esteem, and loss of independence can all affect the illness experience of young adults with cancer. As with all palliative care, a multidisciplinary and patient-centred approach is required in order to meet the needs of patient and family. The Edmonton Symptom Assessment Scale is shown to be a valuable tool for

addressing a wide range of physical, as well as psychosocial symptoms. In planning further management, a supportive environment, continuity of care, and good communication are as important as proactive management of symptoms.

Case of 59 Year Old Female With Vulvar Itching

Dr. Dorota Marczuk

Vulvar complaints are common, especially in young women. Vulvar intraepithelial neoplasia (VIN) is a premalignant change leading to vulvar cancer mainly in premenopausal population. Family physicians are in a good position to diagnose VIN early.

There is a need to increase the awareness of both women and physicians, because there is evidence of diagnostic delays in patients with vulvar cancer.

This is a case presentation of a 59 year old female diagnosed with vulvar intraepithelial neoplasia grade three. A literature search of Ovid and Medline databases and major clinical guidelines was performed. Results of that search are presented here and include definition and epidemiology of vulvar intraepithelial neoplasia, risk factors, clinical presentation, grading system, differential diagnosis and techniques of diagnostic biopsy, prognosis and treatment. This literature review revealed that our patient had classic risk factors and a very typical clinical presentation.

The incidence of human papilloma virus-related vulvar intraepithelial neoplasia is increasing worldwide. This is associated with an increasing incidence of invasive vulvar cancer in young women. There are associations with a history of genital warts, multiple sexual partners, smoking, immunosuppression, and socioeconomic status. On clinical presentation 20-50% of women are asymptomatic. Others complain of pruritus, soreness, irritation, altered sexual functioning, and distortion of body image. There is no pathognomonic clinical appearance of lesions representing vulvar intraepithelial neoplasia.

A substantial delay in presentation was noted in > 50% of women with VIN3. The diagnosis can be difficult. Symptoms are incorrectly assumed to be due to genital infections (candidiasis, genital condylomata) or hormonal deficiency changes.

Randomized controlled trials or national guidelines on the management of vulvar intraepithelial neoplasia [are not existing. cf. do not exist]

Punch biopsy is the gold standard in diagnosis of vulvar intraepithelial neoplasia. A biopsy is recommended in chronic vulvar lesions and is usually well tolerated if done in office settings in a supportive environment.

The Case of Mr. G: An Illustration of Malingering

Dr. Sunil Mheta

Malingering remains a significant problem in the health care industry accounting for approximately 10% of all expenditure for health care in North America. Recognizing the malingering patient is important not only

to prevent health care fraud but to be able to distinguish between legitimate disease and falsified symptoms. This report examines the history of a single patient at the Victoria Family Medical Centre encountered by the author as a resident. The details of various discrepancies in his presentation to the clinic and to other specialties are outlined as well as the possible reasons for his suspected malingering. A brief outline of malingering and techniques used in detecting the malingerer are provided followed by a description of possible management options. The plan for the patient at the centre of this case is then presented.

Pediatric Recurrent Abdominal Pain: A Case Report of Parasitic Infection

Dr. Carol Mills

In the past, I had tested for parasitic infections in patients that reported with chronic diarrhea, recent travel or camping and/or perianal pruritis. These symptoms were suggestive of *Giardia lamblia* and pinworm, the two very common parasites that I was familiar with. The case reported here is of a nine year old male presenting with chronic recurrent intermittent abdominal pain, foul smelling belching and flatus. His history was negative for heartburn, weight loss, diarrhea, nausea, and vomiting. He had not traveled or camped recently and there were no sick contacts. Social history revealed that he lived with his mother, as his father had died when the patient was a young child. His mother reported that he was a well adjusted young boy despite losing his father. Examination was unremarkable. This patient is an example of a child with chronic recurrent abdominal pain. Although there were no alarm symptoms accompanying the abdominal pain I felt the patient required some work up due to the fears and expectations of his mother. Parasitic infection was not in my differential diagnosis, but the staff person suggested testing for ova and parasites. To my surprise, the patient had not just one, but two parasites; *Entamoeba vermicularis* and *Dientamoeba fragilis*. A review of the literature reveals that parasitic infections can cause a variety of gastrointestinal symptoms. Although many parasitic infections do present with the classic history of travel or camping and diarrhea, the literature suggests that this is certainly not required, and in fact many infections can be asymptomatic. This report will discuss the common and uncommon presentations of these two parasites and how to recognize and treat them appropriately.

Selective Mutism: A Case Report

Dr. Monica Nijhawan

Selective mutism is a relatively rare disorder of childhood which has a significant impact on a child's development if it persists. A case of a seventeen year old boy with selective mutism is presented to illustrate how various factors, including genetic and environmental, have led to treatment resistance and a poor outcome. Clinical literature is reviewed to help understand the disorder and show its relationship to anxiety disorders, such as social phobia. Various treatment options including behavioral therapy, pharmacological therapy, and individualized therapy are explored and discussed as they relate to the case.

Female Genital Mutilation: A Case Study

Dr. Angela Novena

The customary and cultural act of altering a young woman's genitalia has been in practice for centuries in many areas of the world. Female genital mutilation (FGM), otherwise known as female circumcision, affects 100 to 140 million women in the world today, and 2 million are at risk every year of undergoing some form of genital cutting. It is most commonly performed in Sub-Saharan Africa, Asia and parts of the Middle East, mostly by societies that follow the Muslim faith.⁶ It is defined by The World Health Organization as "all procedures which involve partial or total removal of external female genitalia or other injury to female genital organs, whether for cultural or any other non-therapeutic reasons" (WHO 1995).⁶ Due to increased immigration from countries that routinely perform these acts, more Canadian physicians are encountering women who have experienced this practice. There are many medical and psychosocial consequences of FGM, and as a result, it is imperative that health professionals are aware of these issues, and are able to recognize, understand and treat FGM. This paper will explore the cultural beliefs of FGM and its classification system. It will discuss the many complications these women experience, both immediate and long term. The case of A.M, a Sudanese woman, and the obstetrical complications she experiences as a result of her circumcision, will illustrate some of these complications.

Esophageal adenocarcinoma in a young, obese female smoker: a case report

Dr. Christie Perry

Background: The incidence of esophageal adenocarcinoma (EAC) has increased dramatically over the past three decades. Many cases are advanced at the time of diagnosis and have a poor prognosis. Although, studies have demonstrated that prognosis can be improved with early detection and treatment. Identifying potential risk factors for this disease is essential for early detection. The present case report describes a 27-year-old woman who developed EAC. The main objective of this report was to identify any risk factors that may have played a role in the development of her cancer.

Methods: Information on the subject was obtained through a chart review and discussion with her family physician. A literature review was completed to identify the risk factors implicated in the development of this cancer.

Results: The two major risk factors associated with the development of EAC are chronic gastroesophageal reflux disease and obesity. Other risk factors include cigarette smoking, low fibre diets, low socioeconomic status and the absence of H. pylori infection. The patient in this case study was identified to have two risk factors, obesity and smoking.

Conclusion: Physicians must be aware of the risk factors for EAC. Identifying patients at risk for this cancer may lead to earlier, more aggressive investigations and potentially earlier diagnosis and treatment. In addition, modifying potential risk factors, such as obesity and smoking, may help prevent this disease. Further studies in EAC prevention need to be conducted

Portal Vein Thrombosis Secondary to Factor V Leiden. A Case Report

Dr. Matthew Shaw

Factor V Leiden is the most common cause of inherited venous thrombosis. The clinical implications of Factor V Leiden can vary depending on the number of affected alleles, and the presence of other pro-coagulant factors. I present the case of JW, a 29 year old man who was discovered to be heterozygous for Factor V Leiden following the diagnosis of portal vein thrombosis.

Acute Pain Crisis

Dr. Ghazala Sultan

Objectives:

1. To describe a case of an advanced cancer patient presenting with an acute pain crisis. Patient's cancer history and medical condition during his hospital admission will be discussed
2. To provide an outline for the management of an acute pain crisis in Palliative care

Case: A 47 yrs old male with widely Metastatic Malignant Melanoma was admitted to our PCU from ER, presenting with severe abdominal pain. There were no chemo or surgical options and the patient's main goal was to have his pain alleviated.

We will present a day by day synopsis of the different Opioids and other analgesics as well as amount Used to manage this patient's acute pain.

During his stay in the hospital he had repeated episodes of acute pain, each requiring control with high doses of I/V narcotics, due to his high pain threshold.

He received thousands of milligrams of narcotics on daily basis without showing any signs of toxicity. After 4 days of continues efforts, using a combination of analgesics satisfactory pain control was achieved and the patient died peacefully.

Conclusion: Acute pain crisis require prompt assessment and proper management especially in terminal cases.

There is often reluctance to use Opioids due to potential side effects.

It is imperative to have proper knowledge about Opioid pharmacology and be comfortable with different dosing strategies, to manage an acute pain crisis.

Delay in the management and under dosing may lead to unnecessary suffering

More than Just a Bug Bite

Dr. Christel Tayag

It's not really just a mosquito bite anymore. It may actually be 'More than just a bug bite.' These pesky mosquitoes not only give you uncomfortable, itchy, red, inflamed hives, they can also give you diseases. There are many diseases that mosquitoes transmit, depending on which part of the world you are in. This project will focus on the disease mosquitoes transmit in North America, particularly, Canada – WEST NILE VIRUS.

The purpose of this project is to present a case of West Nile virus, which has become more prevalent in recent years. This case will also help in recognizing different presentations of the illness.

Key findings of this project revealed that West Nile virus can present in different forms. The virus can present as a flu-like illness to more severe neurological forms, such as encephalitis, meningitis, acute flaccid paralysis, and in extreme cases – death.

The key message of this project is awareness and prevention.

Acute Management Of Hand and Upper Limb Fractures: A Teaching Manual

Dr. Erica Van Daalen

"The Family Physician is a resource to a defined patient population" is one of the four guiding principles of family medicine. Encompassed in this, is the recognition of deficits of knowledge and skills, and the self directed achievement towards their development. In response to a deficit I had, one shared by many family practice residents, is the basic knowledge of fracture management.

According to a recent CIHI study on leading trauma ED visits and admissions, fracture and dislocations of the upper extremity account for 12% and 16% respectively. However in a national survey of family physicians, one of the most reported areas of deficiencies was the management of fractures (reductions, casting) with only 32.6% of all physicians providing this service to their patient population.

Reflecting on my personal training, I have spent collectively 8h in formal instruction on fracture management either through orthopedics clinics (with cast technicians or residents/fellows in orthopedics) or in the emergency department. Do I feel I am a resource to my practice population?

In response to this, I have developed a brief teaching module demonstrating the recognition and management of 9 upper extremity fractures which can be completely managed by a primary care physician. The module is geared for clinical clerks or PGY-1 residents interested in gaining a solid, basic approach to fracture management which will in turn facilitate a more complex understanding when rotating through a primary care specialty.

SECTION B

PRESENTATIONS – ROOMS 1 & 2

TIME	PRESENTER	PRESENTATION
08:30	Coffee, Refreshments - Outside Room D1-171 and D1-173, Poster Displays	
08:50	Dr. Stephen Wetmore	Opening Remarks in Shuttleworth
09:00	Tatiana Golu	Is Statin Therapy Effective for the Primary Prevention of Cardiovascular Disease in Low-risk Patients?
09:15	Lucille Chan	Osteoporosis in Men
09:30	Daniel Leger	Scurvy: The Re-Emergency of Nutritional Deficiencies
09:45	Mekalai Kumanan	Early Detection of Ovarian Cancer: A Review of Literature
10:00	Leanne Peters	The Inactivity Crisis: Canadian Youth Face a Big Challenge in the Obesity Epidemic
10:15	Ramesh Reddy	The New Specialty of Family Medicine in Canada: Is a New Paradigm in Residency Training Required?
10:30	Coffee, Refreshments - Outside Room D1-171 and D1-173, Poster Displays	
10:45	Ryan D'Souza	Role of Recombinant Human PTH (1-34) in Treatment of Osteoporosis in Post-Menopausal Women
11:00	Victor Ng	The Safety of Creatine Supplementation on Renal Function in Humans
11:15	Michael Olah	International Medical Graduates: Friend or Foe
11:30	Nancie Parent	Harm Reduction
11:45	Muna Farooqi	Global Health: A Call to Action
12:00	Lunch- Livingston Lounge	
12:15		
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12:45		
13:00		
13:15	Matthew Renaud	In Support of Innovation...
13:30	Melissa Johnson	Learning Empathy Through Experience: Reflecting Upon My Time as a Patient
13:45	Carmen Schmitz	Stewards of Scarce Resources: How Are We Training Our Family Medicine Residents in Obstetrics?
14:00	Carroll Harder	Creation of An Evidence-Based Dementia Care Flow Sheet
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15:00	Poster Displays in Room D1-171 and D1-173	
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16:00		

Is Statin Therapy Effective for the Primary Prevention of Cardiovascular Disease in Low-risk Patients?

Dr. Tatiana Golu

Introduction: The role of statins is shifting from lipid management to overall coronary risk reduction. Statins are recognized as highly effective for both primary and secondary prevention of coronary heart disease (CHD). Although consensus has been reached on the use of statins in high-risk patients, there remains considerable controversy regarding the appropriate use of statin therapy in patients without manifest atherosclerotic cardiovascular disease.

Objective: The purpose of this review is to qualitatively evaluate whether statin therapy is effective for the primary prevention of cardiovascular disease in low-risk patients.

Quality of evidence: MEDLINE, EMBASE and Cochrane Databases were searched for primary prevention statin trials. Several randomized control trials (RCTs) and meta-analyses of the major statin trials have assessed the effectiveness of statin therapy in primary prevention of CHD. Few RCTs reported statin therapy effectiveness in low-risk patients, while meta-analyses compared the benefit of statins in different CHD risk groups. One RCT demonstrated the effect of therapy with statin on subclinical atherosclerosis.

Conclusion: Statin therapy is effective and safe for the primary prevention of cardiovascular disease in patients without a history of MI, symptomatic CHD, stroke, or peripheral artery disease. The evidence is clear that statins substantially reduce CHD events. Benefits accrue in patients at all levels of CHD risk. The magnitude of statin effectiveness in the primary prevention of cardiovascular disease appears to be less prominent in low-risk patients when compared to high-risk groups.

Osteoporosis in Men

Dr. Lucille Chan

Much evidence and guidelines for osteoporosis seem to focus on Caucasian post-menopausal women in terms of risk factors, screening and treatment. A review of current literature regarding guidelines and evidence for osteoporosis in men, with a focus on assessment and pharmacological treatment applicable to a Canadian population, revealed the following salient points:

Risk factors in men are similar to those in women- three major factors include:

- age greater than 65 years old
- previous fragility fracture after 40 years of age
- systemic glucocorticoid treatment of ≥ 3 months

In interpreting **bone mineral density (BMD)**, z-scores should be used for men younger than 50. In addition, the BMD should not be the only factor used in assessing fracture risk. The model of 10 year absolute fracture risk suggested by Osteoporosis Canada accounts for the BMD, but also age, gender, past fracture history and glucocorticoid exposure. Men in the highest 4 categories of fracture risk should be treated.

Lifestyle factors include adequate exercise, supplementation of calcium and Vitamin D, as well as avoiding excessive caffeine and salt. Multi-interventional and individual exercise programs may help reduce risk of falls.

First line pharmacotherapy for idiopathic osteoporosis includes alendronate or risedronate. They can also be used for prevention and treatment of glucocorticoid induced osteoporosis. Etidronate is recommended only for prevention, not treatment, of glucocorticoid-induced osteoporosis.

2nd line treatment could include teriparatide, for severe fractures and osteoporosis (either idiopathic or due to glucocorticoids). Teriparatide could also be considered in cases of bisphosphonate failure and continued incidence of fragility fractures.

Scurvy: The Re-Emergency of Nutritional Deficiencies

Dr. Daniel Leger

Early recognition of nutritional deficiencies, such as scurvy, can be difficult since symptoms are often vague, non-specific and can mimic a wide variety of more common illnesses. The following case report highlights the devastating effects of vitamin C deficiency on the physical and mental health of a forty seven year-old gentleman. After extensive investigation, the diagnosis of scurvy was confirmed by performing a skin biopsy and consequently verifying ascorbic acid serum levels. Symptoms of fatigue, confusion, lethargy and weakness dramatically resolved within only a few days of regular vitamin C supplementation. At the time of discharge, the classic features of bruising, perifollicular hemorrhages and gingival bleeding had begun to improve and the patient was expected to make a full recovery. In retrospect, clinical findings were consistent for scurvy; however, lack of awareness and experience with such rare nutritional deficiencies resulted in unnecessary and invasive investigations. The following report will emphasize the importance of educating patients, families and medical staff about nutritional deficiencies in order to effectively identify, manage and prevent these rare life threatening illnesses.

Early Detection of Ovarian Cancer: A Review of the Literature

Dr. Mekalai Kumanan

Ovarian cancer is the leading cause of death from a gynecological malignancy among women in Canada, and the fifth leading cause of cancer deaths among women overall, following lung, colorectal, breast and pancreatic cancer.¹ In 2007, it was estimated that 2700 women would be diagnosed with ovarian cancer in Canada, with an estimated 1700 dying of the disease in the same year. This relatively high case-fatality rate is reflective of the lack of an adequate screening tool for early detection of the disease. This paper will review screening tests that have been considered for use in the early detection of ovarian cancer. Current evidence regarding the efficacy and limitations of both CA125 and transvaginal ultrasonography will be reviewed. Recent studies have not found CA125 or transvaginal ultrasonography to be useful as independent screening tests for ovarian cancer. However, using ultrasonography as a second-line test for abnormal CA125 levels may be useful as part of a multimodal screening strategy.

Current guidelines recommend against screening for the general population. In the absence of reliable screening methods and guidelines, the recognition of symptoms of early disease assumes great importance. The literature was reviewed in an attempt to identify target symptoms and symptom characteristics that may signify malignant disease. Women with ovarian cancer were found to generally have more symptoms with increased severity and frequency compared to women without malignant ovarian disease. Physicians should remain aware of the possibility of ovarian cancer when a woman presents with specific symptoms.

The Inactivity Crisis: Canadian Youth Face A *Big* Challenge in the Obesity Epidemic

Dr. Leanne Peters

Canada is facing a crisis. Inactivity and obesity are on the rise, and everyone is paying the price. Childhood obesity has tripled over the past three decades^(6,8). Obesity and physical inactivity are major contributors to chronic diseases including diabetes, hypertension, and cardiovascular disease, all of which we are seeing at younger ages than ever. The resulting impact on cost and resources for chronic disease management in the future is almost unimaginable. The burden of obesity and inactivity on the health care system, as well as direct and indirect economic costs have been estimated at \$5.1 billion^(6,4). Treating and preventing obesity has become not only an important determinant of health, but also a public health issue. Youth are under the significant influence of many external factors including parents, peers, school, and health professionals. This is in addition to the media, government and socioeconomic factors that play a role in a child's likelihood to participate in physical activities. Primary care physicians play a vital role in the counseling and education of both parents and children, yet due to barriers such as lack of time, knowledge and experience, only 36% to 48% of primary care physicians counsel to promote physical activity⁽⁴⁾. Physicians can help by providing age-specific recommendations for physical activity based on the individual and family, focused counseling sessions for children and their families, regular follow-up with BMI charting, and tailored interventions, written materials, and use of a multidisciplinary team.

The New Specialty of Family Medicine in Canada: Is a New Paradigm in Residency Training Required?

Dr. Ramesh Reddy

Purpose: This essay explores the current family medicine training scheme in Canada and poses the question of whether family medicine training needs to be changed as Family Medicine has recently been designated a specialty in Canada.

Scope: The focus of this essay is determining the optimum family medicine residency training length by looking at other models of training in different countries. It also focuses on the impact of additional third year training programs on the new specialty of Family Medicine.

Method: Pubmed was utilized using the search terms "Family Medicine Residency", "accelerated Family Medicine residency". The Canadian Medical association database was searched using the terms "CCFP

EM". The Canadian Family Physician article database was searched using the terms "Family Medicine Residency".

Results: The literature reviewed suggests that Canadian residents doing a two year residency perform equally well compared to their American and international counterparts (who in general have longer residencies) on licensing examinations. The literature also suggests that the additional skills training year in emergency medicine is incongruent with the goals of the CFPC with regard to family medicine practice.

Conclusions: The general conclusion of this essay is that the 2 year family medicine residency should remain unchanged even though family medicine is now recognized as a specialty. The essay also concludes that additional training year in Emergency Medicine should be re-evaluated and possibly removed as it dilutes the goals of family medicine as a specialty.

Role of recombinant human PTH (1-34) in treatment of Osteoporosis in post-menopausal women

Dr. Ryan D'Souza

Objective: To study the effects of recombinant human PTH(1-34) on BMD, antifracture efficacy and use in treatment of post-menopausal osteoporosis.

Methods: I reviewed Medline, PubMed and Cochrane database for trials and meta-analyses assessing effectiveness of PTH. Current Canadian Osteoporosis guidelines were also reviewed in detail. A MEDLINE database (1966 to 2007) search was performed for Randomized Controlled Trials in humans. Outcomes included change in bone mineral density (BMD), fractures and adverse events.

Results: Parathyroid hormone (usually subcutaneous) dosages varied markedly across the 20 randomized controlled trial studies retrieved. In the range of 50 to 100 µg/d, effects may be dose-related. Results of larger trials (up to 1637 patients) were conflicting as to whether effects were limited to the spine and suggested detrimental effects on radius bone mineral density. Increases in spine bone mineral density are induced by PTH in postmenopausal osteoporosis. Parathyroid hormone decreased the incidence of radiographically detected spinal fractures. PTH injections were difficult for some patients to comply with. Occasionally, PTH-associated hypercalcemia may be dose-dependent, often manifesting early in treatment.

Conclusions: Parathyroid hormone decreases vertebral fractures and increases spinal bone density in postmenopausal osteoporosis and glucocorticoid-induced osteoporosis, but at the expense of a decrease in radius bone density. The long-term safety and nonvertebral fracture efficacy are unknown.

The Safety of Creatine Supplementation on Renal Function in Humans

Dr. Victor Ng

Supplementation with creatine, an unregulated performance-enhancing compound, has become increasingly common among professional and amateur athletes. Although creatine use is viewed as relatively safe, there have been a few anecdotal reports of renal dysfunction following creatine supplementation that may be a cause for concern. The objective of this review was to assess the literature evaluating the effects of creatine supplementation on renal function in humans. A PubMed search was conducted to identify relevant articles using the keywords "creatine supplementation" and "renal function". Seventeen pertinent human studies and case reports were identified. Based on the existing literature, creatine supplementation at the recommended doses appears to be safe with respect to renal function in young, healthy adults in the short and medium-term. However, larger prospective randomized controlled trials need to be done to assess the safety of creatine with respect to renal function in the long-term. In addition, creatine's effects on renal function in children and adolescents, the elderly, and in those with renal disease, need to be further evaluated. Results from these studies will allow practitioners to give evidence-based, non-biased opinions regarding the safety of creatine and proper counseling if adverse effects occur.

International Medical Graduates: Friend or Foe

Dr. Michael Olah

Objective: To demonstrate the role and contributions of International Medical Graduates in the Canadian Health Care system while highlighting biases in the system.

Main Message: International Medical Graduates (IMG's) have historically contributed to the Canadian Health Care system and today make up 25% of all physicians working in the country and more than 50% of family physicians in certain provinces. IMG's are evaluated beyond the uniform standard set by Sir Roddick who created the Medical Council of Canada. The government invests millions of dollars graduating CMG's while IMG's come with their diplomas in hand costing the government nothing. Biases built into the system create gaps between IMG's and CMG's. Furthermore, IMG's are forced into mandatory return of service contracts while CMG's are given financial incentives for shorter contracts.

Conclusion: International Medical Graduates are highly skilled physicians who immigrate to Canada to contribute to bettering the Health Care system. Both student and medical organizations should represent these physicians equally. Biases built into the system should be eliminated giving equal opportunity to all.

Harm Reduction

Dr. Nancie Parent

In this Essay, I explain the concept of harm reduction and present evidence supporting its use in preventing the spread of HIV in intravenous drug using communities and by extension the community at large. The definition, rationale and strategies of harm reduction are discussed.

HIV among injecting drug users is a very important issue globally. Harm reduction strategies have been shown to be safe, cost-effective and efficacious, yet due to many barriers their implementation to coverage remains low. The evidence supporting needle exchange programs, substitution treatment programs and supervised injection facilities is overwhelmingly supportive, prompting scientists to assert that the "Scientific debate is now over."

I discuss the barriers to implementation of the harm reduction strategies and where we need to focus our efforts in the future in the fight against the spread of HIV/AIDS among intravenous drug users.

Global Health: A Call to Action

Dr. Muna Farooqi

This essay looks at the state of global health and highlights the need for family physicians to get involved in global health initiatives. It explains the role family medicine can play in promoting global health projects and the various ways that family physicians can participate in these efforts. A list of some of the main organizations in Canada working in the global health arena and related resources is provided in the appendix.

In Support of Innovation...

Dr. Matthew Renaud

The current two year model of training is not meeting the needs of residents as it suffers from three fundamental flaws. Firstly, an aging Canadian population has increasingly complex needs. Secondly, resident demographics and preferences are making the broad scope of family medicine less attractive. Lastly, medical knowledge is increasing while simultaneously, restrictions on resident working hours have reduced clinical exposure. The time has come for a national debate on creating a new three year model of training.

The "brand" of family medicine has been diminished after years of declining student interest and a lack of respect by specialists and the public. By innovating and creating excitement about a new curriculum, more students will be attracted to the discipline. In a three year model, residents would focus on a core basket of skills in the first two years of the program. Some areas, such as intrapartum care, would be deemphasized. The third year would allow residents to focus on an area of interest, such as procedural skills. These new skills will increase prestige among our specialist colleagues and the public. They will also be complimentary in the current model of group practice, allowing physicians to refer patients within their own group.

Implementation will require a commitment from faculty and residents and a financial commitment from the government. A pilot program involving only select schools will allow residents to see the value of extending training and reward early adopters. Enhanced remuneration would also support the program.

Learning empathy through experience: Reflecting upon my time as a patient

Dr. Melissa Johnson

Empathy has been associated with greater competence in history taking and physical examination. More empathetic physicians and medical students received higher satisfaction ratings from patients. Patients show better treatment adherence and greater enablement with more empathetic doctors. Physicians who utilize an engaged, psychosocially oriented communication style burn out less frequently. The importance of empathy in the physician-patient interaction has been well established. Despite growing efforts to foster empathy early in medical training, studies have shown a decline in empathetic concern among first year internal medicine residents, a finding to which I certainly could attest to. At the end of my residency I was thrust into the role of the patient for the first time since I started my medical training. I found myself wondering: Could reflecting upon my own personal experiences as a patient help me be a more empathetic doctor?

In the body of this essay I have attempted to examine how my illness has contributed to my understanding of the key concepts of physician empathy as described in the work of Hojat et al. This literature based reflection has allowed me to reframe my experience in a way that may have a positive impact on my evolving medical persona. If nothing else I have become aware that taking time to reflect upon my personal experiences, whether health related or otherwise will indeed help me be a more empathetic doctor.

Stewards of Scarce Resources: How are we training our Family Medicine residents in obstetrics?

Dr. Carmen Schmitz

Participation in family medicine obstetrics has declined across the country raising the question of how we can motivate new Family Medicine graduates to choose to include this skill set in their practice. In spite of a focus on obstetrics in Family Medicine residency training programs we continue to have studies that show Family Medicine graduates feel inadequately trained and see too many lifestyle barriers to including intrapartum care in their practices. Our current training standards require resources to be diffused between residents who have the potential to practice obstetrics in the future, and those who have already decided against it; thereby failing both populations. By targeting residents who may go on to practice obstetrics, we could provide them with appropriate role models and a more intensive obstetrics experience, thereby increasing their interest and motivation in this area. This would also allow other residents, who are not as interested in obstetrics, to develop skills that are best suited to their practices. In doing so we can foster a more sustainable system, by encouraging the interest that some residents have in practicing obstetrics, graduating more family physicians who choose to provide intrapartum care, and thereby graduating more family physicians who go on to teach, train and role model how obstetrical care fits into family practice.

Creation of An Evidence-Based Dementia Care Flow Sheet

Dr. Carroll Harder

Objective: To combine evidence-based consensus statements and recommendations into a structured and comprehensive clinical tool that can be used in the assessment and management of dementing disorders. This tool will be in the form of a flow sheet providing a simpler way of tracking symptoms, progression of the disease, and of treatment success or failure.

Method: Research on clinical practice guidelines, consensus statements and evidence-based recommendations was carried out. Several resources currently used in clinical practice were also used to provide adjuncts to the flow sheet. The format of the flow sheet is based on clinical tools already in use for different patient populations.

Results: The expectation is that the clinical tool will be a user-friendly flow sheet and will result in the best care for patients with dementia as well as their caregivers by ensuring that every aspect of their care is addressed regularly. This will provide potential for consistently improved clinical care for those with dementia.

Conclusion: The implications of use of the flow sheet are that patients with dementia will not be left with reversible conditions, that they will remain independent as long as possible, that decision making will be addressed early and done by the patient while still competent, and that caregivers will not be overburdened, but instead have ready access to community resources and be best able to contribute to the ongoing care of their loved one.

SECTION C

POSTER DISPLAYS – ROOM D-1 171 & D1-173

PRESENTER	POSTER DISPLAY
Sandeep Aggarwal	A Case of Vitamin D Deficiency
Merritte Botrous	Childhood Obesity: Case Report
Mario Bueno	The Use of Insulin in Type 2 Diabetes Mellitus
Jaclin Butris	Family Physician And The Journey To End Of Life
William Paul Fox	Rosacea and Ocular Complications: "Gotta keep your eye on the ball"
Lucie Gijzen	The needs of Canada's aging population: another reason to revisit the fee-for-service debate
Nin Jing	A Case Study: Reproductive Health in Intellectually Disabled Women
Allison MacQueen	The Difficult Patient
Laura Montour	Case Report: Bupropion for weight loss in an overweight 44 year old woman with mild depressive symptoms
Shamidah Noorani	Patient Centered Care Strategies: The role of Information and Information Technologies
Khalid Nurae	Review of Clinical Prediction Rules in Predicting the Risk of Bleeding in Patients Taking Warfarin
Natalie Pang	Counseling the Athlete: Proper Weight Gain and Use of Ergogenic Aids
Martin Schleich	Review of current Literature: IgA Nephropathy
Hannah Snider	Mind-Body Medicine and its Importance in Primary Care

A Case of Vitamin D. Deficiency

Dr. Sandeep Aggarwal

Vitamin D deficiency is a cause of fatigue, myalgia, arthralgia, and bone pain that is not routinely considered by primary care physicians. Diagnosis is achieved via blood testing for vitamin D levels and treatment involves adequate sun exposure and supplementation with oral vitamin D for several weeks. This report presents a case of a 55-year-old female who presented with nonspecific musculoskeletal complaints which was later attributed to vitamin D deficiency.

Childhood Obesity: Case Report

Dr. Merritte Botrous

Childhood obesity is becoming a rapidly growing public health concern. The increased incidence of childhood obesity, is associated with an increased incidence of several diseases previously thought of as diseases of adulthood including hypertension, type 2 diabetes and the metabolic syndrome. Patients with any of these chronic conditions are at increased risk of subsequent cardiovascular events as they progress into adulthood. As a primary care physician, it is important to identify at-risk patients in order to implement successful intervention strategies. In this report I will review a case of childhood obesity, and will discuss some of the cardiovascular, metabolic and psychosocial complications related to the case.

The Use of Insulin in Type 2 Diabetes Mellitus

Dr. Mario Bueno

Type 2 Diabetes Mellitus is a common chronic condition associated with multiple serious complications when not adequately treated. It has been shown that treating aggressively to control blood glucose levels will decrease the risk of microvascular and macrovascular complications (3). When treatment is tailored to achieve targets in associated risk factors like high blood pressure, hyperlipidemia, obesity and smoking status, patients can get great benefits. Due to the increasing prevalence of Type 2 Diabetes, and the limited resources available to face the epidemic, there has been a lot of interest in prevention and management (1). During my training period as a Family medicine resident I have been faced with a substantial number of diabetic patients, being able to make the diagnosis on several occasions. As a family doctor I will continue to play an important role in the management of this patient population. These facts motivated me to conduct literature search on the use of insulin in type 2 DM.

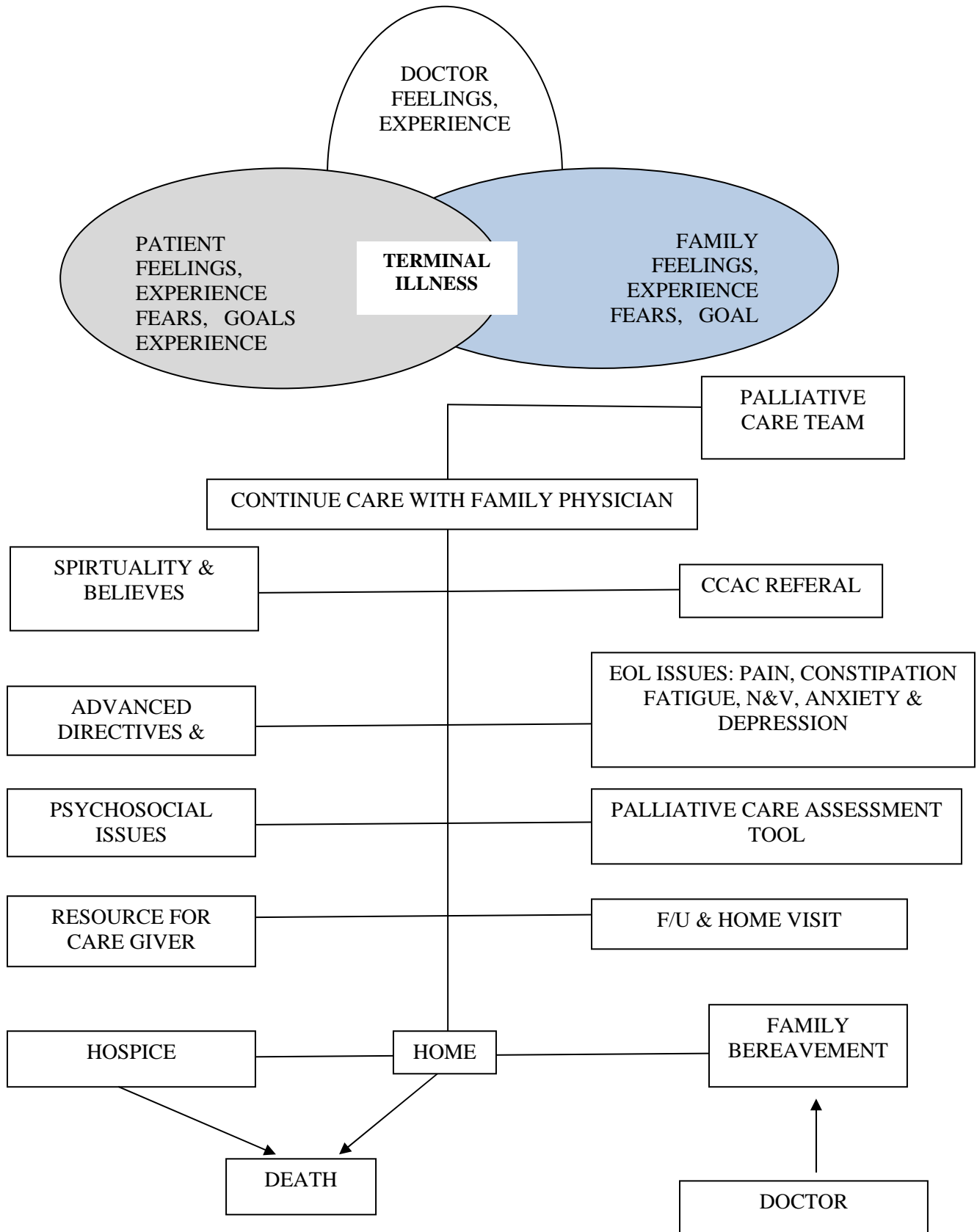
Information on diabetes management is abundant. Some of the sources are very good reviews, and the Canadian Diabetes Association Guidelines are very helpful. After reviewing about 30 references, I was able to get a fairly clear picture on the use of insulin in type 2 DM. The pathophysiology of B cell dysfunction was a key element found in this review. Insulin introduction, augmentation and replacement is easier to understand from the perspective of B cell dysfunction.

Many articles about therapy with oral medications either alone or in combination with other oral agents and/or insulin, were included. Most patients will be on oral medications, and will remain on them when insulin is added to the regimen.

Family Physician And The Journey To End Of Life

Dr. Jaclin Butris

FAMILY PHYCISIAN AND THE JOURNEY TO END OF LIFE



Rosacea and Ocular Complications: “Gotta keep your eye on the ball”

Dr. William Paul Fox

Rosacea is a common and chronic inflammatory disorder, with a fluctuating course, involving the skin.² Prevalence has been reported as high as 10 %^{3,5} and, although rosacea is typically regarded as a disorder of the skin, it often affects the eyes with a prevalence reported as high as 58%.^{5, 6} Chronic ocular involvement of rosacea can lead to vision loss, and despite common ectodermal origins, many family physicians overlook dermatologic conditions when confronted with a red eye.

Case description: A 78 year-old nun who was seen in the family practice office with a complaint of persistent right eye conjunctivitis for 2 months, significant tearing and a white-brown discharge without morning crusting. The patient also had a mild, non-tender, non-pruritic rash on her face for the previous 2 months. She had been previously treated with topical erythromycin, ciprofloxacin, and Viroptic®, following visits to the emergency department, family practice office, and optometrist. She had been having increasing distress over the persistence of her eye condition after numerous visits and alterations in treatment. After referral to on-call ophthalmology service, she was seen, diagnosed, and treated for ocular rosacea. This case report explores rosacea and ocular complications of rosacea, as well as treatment options for both. The ocular involvement of rosacea is poorly appreciated and under-diagnosed, despite the frequency and the potential for vision loss.³ Family physicians need to be more aware of the complications of this common, yet potentially life changing disorder.

The needs of Canada’s aging population: another reason to revisit the fee-for-service debate

Dr. Lucie Gijzen

The debate on how physicians should be paid for their services remains controversial and highly emotional within Ontario and Canada. Much of the debate tends to focus either on what is best for the taxpayers or what is most advantageous for the physicians. So far, the compensation discussion hasn’t been evaluated against medically specific groups but rather looked at patient’s needs more broadly. This paper reviews the medical needs of Canada’s fastest growing demographic group, the elderly, in conjunction with the different physician remuneration systems. It will demonstrate that the health care requirements of an aging population clearly point away from the traditional compensation regimen of fee-for-service. The health care system needs to adjust its remuneration to systems such as capitation or salary to benefit both the elderly and the family physicians caring for them.

A Case Study: Reproductive Health In Intellectually Disabled Women

Dr. Nin Jing

A common ethical dilemma facing many community health professional is the provision of proper and necessary medical care to developmentally disabled patients. This special population usually lacks sufficient knowledge to make correct decisions and following the required medical instructions. The medical care becomes further complicated when the patients' family and children are involved in this process. Finally, it is the primary care physicians' responsibility to consider a holistic approach by considering the interest of the community and society at large when addressing the concerns of disabled patients'. This article presents a case study for a intellectually disabled woman who intends to pursue becoming pregnant. The research explores methods of how to care for this patient by assisting in the difficult decision making process which involves a multidisciplinary care setting. Role of trust, communication and compromise is emphasized in this case as the essence to provide the necessary care for the patient's best interest.

The Difficult Patient

Dr. Allison MacQueen

Approximately 15% of patient encounters are rated as difficult by physicians. How can we approach these situations and patients in a proactive way, to create a positive therapeutic alliance?

The first step is to identify the contributing factors. These can include patient and physician characteristics as well as the environment in which the encounter occurs. Next, by recognizing what type of patient you are dealing with, you can modify your approach and tailor it specifically to your patients needs. The most common difficult encounters include those that involve overly-emotional individuals, drug seekers, frequent flyers and psychosomatic concerns.

Not all patients will fit a certain category, but there are several ways that we can troubleshoot when a difficulty occurs. With a little practice and forethought, these patient encounters can be mutually satisfying and can even be quite rewarding.

Case Report: Bupropion for weight loss in an overweight 44 year old woman with mild depressive symptoms

Dr. Laura Montour

The development of practical new approaches to assist in weight loss is imperative. Overweight and obese individuals have a tremendous impact on our health care system, with health consequences such as diabetes and hypertension. In the past, medications for weight loss have had deleterious side effects. The weight loss medications currently approved are costly and can have problematic side effects (7). In order to have meaningful effect, pharmacologic weight loss treatments need to be affordable and well tolerated.

Bupropion has been shown in various short-term studies to cause “modest” weight loss (2)., I identified a 44 year old, at risk, overweight woman at her periodic health exam and followed her from November 2007 to February 2008. She was highly motivated to lose weight and had been unsuccessful losing weight with lifestyle alone, and with Meridia. She did achieve some weight loss with Meridia and Orlistat, but there were financial barriers and she could not tolerate the side effects of Orlistat. Bupropion is not approved for weight loss but I believed that this may be an option because she also had concurrent mild depressive symptoms. This patient was monitored closely over 12 Weeks for 30 minute visits focusing on psychosocial barriers to weight loss and medication side effects. She did not have any side effects and at 12 weeks she had lost 20 lbs, over 11% of her total body weight, thereby decreasing her risks of obesity-related comorbidities. This case illustrates how bupropion shows promise as an affordable and well tolerated pharmacologic option for weight loss.

Patient Centered Care Strategies: The role of Information and Information Technologies

Dr. Shamidah Noorani

Whilst physicians and care providers have made significant changes in clinical care processes to ensure, facilitate and promote patient-centric care; the same cannot yet be said about how information and information technologies are conceived, designed, incorporated, implemented and utilized to realize and facilitate this paradigm – the paradigm that enables patients to take center stage in coordinating and managing their health and health care experience. Most information and information technology solutions aim to automate the care provider’s traditional administrative processes (billing, coding, scheduling, etc) and recreate an electronic version of the patient’s paper chart for clinical care management. A gradually increasing number of solutions further attempt to provide the patient some access to this information. Information shared between patient and the care provider is still limited to “informed” consent and generic patient education material. There remains an untapped opportunity for innovation that enhance targeted and personalized exchange of information between patient and care providers together with the appropriate information tools that empower patients to take greater charge of and participate in their care process.

This essay attempts to explore the current status of thought, approaches, opportunities and obstacles towards patient centered information systems, and offers a potential emerging vision and direction as to how such an information architecture may shape up in the future.

Review Of Clinical Prediction Rules In Predicting The Risk Of Bleeding In Patients Taking Warfarin

Dr. Khalid Nurae

PURPOSE: To review the predictive ability of clinical prediction rules for estimating the risk of bleeding in patients taking warfarin

METHODS: Literatures were identified through PubMed MEDLINE (1966-December 2007), EMBASE (1980-December 2007) and Cochrane Database of systemic Reviews (to December 2007) using the search terms anticoagulant or warfarin and bleeding, hemorrhage, risk assessment, prediction, and prediction rules. Additional references were obtained through review of references from articles obtained. Articles included in this review all used a clinical prediction rule to estimate the risk of bleeding in patients taking warfarin. The quality of the studies and readiness of the predictive tools to be used in clinical settings were assessed.

RESULTS: Seven studies met review eligibility criteria. The modified outpatient bleeding risk index is assessed as having moderate predictive ability with a likelihood ratio of 9.06 in predicting the risk of bleeding in patients classified as high risk for bleeding. In terms of its readiness for use in clinical practice it is classified as having level 2 evidence.

CONCLUSIONS: The modified outpatient bleeding risk index can be used as an evidence-based guide for assessing the risk of warfarin-related bleeding for patients taking warfarin. It can be used in conjunction with other assessments and clinical judgment specific to individual patients to determine appropriateness of warfarin therapy. Knowledge of the risk category could indicate those in whom closer monitoring of anticoagulant therapy may be of benefit. The ability to classify patients with greater risk for hemorrhage could be beneficial in guiding warfarin therapy and could be incorporated in decision aids.

Counselling the Athlete: Proper Weight Gain and Use of Ergogenic Aids

Natalie Pang

Athletes throughout history have ingested supplements in the goal of increasing muscle mass and enhancing performance. The use of these ergogenic aids has gained popularity in the second half of the 20th century because of the media exposure of certain famous athletes as well as the accessibility of products over the internet. The purpose of this discussion is to provide background for a patient information handout regarding proper weight gain in sports and the use of ergogenic aids. In addition, this brief overview will allow family physicians to better understand the mechanism of action, the effectiveness, and the adverse effects of protein supplements, creatine, stimulants, human growth hormone, anabolic steroids, and steroid precursors.

Review of Current Literature; IgA Nephropathy

Dr. Martin Schleich

IgA nephropathy is the most common type of primary glomerulonephritis in the world, and although considered a "benign" condition, in North America it leads to ESRD in approximately 30% of patients. In IgA nephropathy, IgA immune complex deposits (along with IgG and C3) in the mesangium of the kidney, leading to an destructive inflammatory reaction that will ultimately cause mesangial damage, and renal impairment. IgA nephropathy can present as gross hematuria following an upper respiratory infection, however only half of patients present this way, the remainder, present either incidentally, on a random urine dip, showing microscopic hematuria or evidence of proteinuria, or rarely with nephrotic syndrome or a

rapidly progressive glomerulonephritis with its stigmata (elevated blood pressure, proteinuria, edema, evidence of renal disease).

A search on pubmed for treatments of IgA nephropathy was performed, those studies that were in the form of randomized controlled trials were included in this report. It was discovered through review of literature that patients with IgA nephropathy, and chronic renal failure, for that matter, with elevated blood pressure, and minimal proteinuria (<1g), and mild histological features, should be targeted with ACE-I or ARB, or their combination to obtain a blood pressure of less than 130/80. The use of omega-3 fatty acids can be done additionally, in patients with higher levels of proteinuria. Immunosuppressive therapy should be reserved for patients who display significantly elevated blood pressure, severe proteinuria, or proliferative lesions on renal biopsy.

It was discovered that advances not only in defining prognostic groups, disease markers, but also treatments tailored to patients, is still needed, and that family doctors have an important role not only the diagnosis of IgA nephropathy but also in monitoring kidney function as work in collaboration with nephrologists.

Mind-Body Medicine and its Importance in Primary Care: Abstract

Dr. Hannah Snider

Background: Most family physicians recognize that a variety of psychosocial factors have an effect on physical symptoms. However, the truly intimate connection between these processes is rarely appreciated. Mind-Body Medicine is an emerging field that focuses on the connections between behavioural, psychological, spiritual and physical processes. The objective of this paper is to explore the mind-body connection and its importance in primary care by investigating the exciting new field of psychoneuroimmunology, the placebo effect, the stress response and the effect of chronic stress, and finally, the potential uses of psychoneuroimmunology principles in primary care therapies.

Methods: A literature review was completed using the search terms psychoneuroimmunology and mind-body medicine. This review revealed ample evidence linking chronic stress to decreased immune system functioning, and increasing susceptibility to a variety of illnesses.

Summary: Psychoneuroimmunology and Mind-Body Medicine principles have been applied to behavioural intervention programs which include relaxation training, guided imagery, biofeedback and hypnosis. These techniques have been shown to decrease both systolic and diastolic blood pressure, decrease heart rate and gastrointestinal motility, and have been associated with a decreased number of medical visits for patients with fibromyalgia. There is also significant evidence that psychosocial mind-body interventions have a role in treating headaches, coronary artery disease, chronic low back pain, incontinence and insomnia.

Family physicians have the unique opportunity and responsibility to utilize and encourage use of these techniques among their patients. Using these principles in addition to traditional health care therapies offers a possibility of healing potential far beyond what we can imagine today.
