This new monthly feature highlights four articles in the current print and online issue of Mayo Clinic Proceedings. These articles are also featured on the Mayo Clinic Proceedings’ YouTube Channel (https://mayocl.in/2U1xy5H), and may be also discussed by an accompanying editorial.

As “Highlight” is often used by journals to denote such features, a different rubric was sought to signify this feature in the up-front section of Mayo Clinic Proceedings. Limelight—a word the Editor-in-Chief first learned when he saw, in his early years, the classic 1952 movie “Limelight” starring Charlie Chaplin, Claire Bloom, and Buster Keaton—illuminates and draws attention to someone or something; the provenance of the word limelight resides in the incandescence emanating from the heating of quicklime encased in cylinders, a method used to illuminate theatrical stages in the 19th century. “In the Limelight” was settled upon as the rubric by which to describe this new feature in Mayo Clinic Proceedings.

VIRUSES AND VASCULOPATHY

With their promiscuous behavior with mammalian cells and their capacity to commandeer cellular organelles for unintended and unhealthy ends, viruses exert pleotropic effects, ranging from harmless conditions, to debilitating but self-remitting syndromes, to relapsing conditions and chronic unremitting diseases, and, finally, to acute potentially fatal diseases. Notwithstanding this broad spectrum of harmful effects, viral infections, however, are uncommonly associated with vasculopathies. In a longitudinal retrospective study based on Truven Health MarketScan Commercial and Medicare claims dataset linked to electronic health records, Patterson et al provide convincing evidence that in the 4-week period surrounding the diagnosis of herpes zoster in patients aged 18 years or older, the incidence rate ratios for both transient ischemic attack and stroke are increased. This finding holds true for all patients as well as for younger patients in the age range 18 to 49 years. The strengths of this study are multiple. First, it is the largest study of this association undertaken in the United States, and its findings are supported by a limited number of smaller studies of this association based on populations in the United States, and other studies involving populations outside the United States. Second, this study is the first to use both propensity and direct matching in its analysis of this association. Third, it adds to other studies both in the United States and elsewhere demonstrating that herpes zoster infections are associated with vasculopathies, including, as previously shown, myocardial infarction and coronary artery syndromes. Fourth, it potentially adds herpes zoster as a new risk factor for transient ischemic attack and stroke, along with such conventional risk factors as hypertension, smoking, hypercholesterolemia, and diabetes. Fifth, it is relevant to the issue of recommendations regarding vaccination against herpes zoster infection, especially with the extension of such recommendations to include younger individuals. This Original Article is discussed in a perceptive Editorial by Drs Nagel and Bubak, experts in the field of viral infections involving the nervous system.

Patterson BJ, Rausch DA, Irwin DE, Liang M, Yan S, Yawn BP. Analysis of vascular event


ADAPTING AND IMPROVING THE ELECTRONIC HEALTH RECORD

Especially for those of us who practiced in the bygone age of the paper medical record with its inconsistent and challenging penmanship, delayed accrual of lab results, and entries that may be either misplaced or missing, the electronic health record is a true marvel of information and communication that moves with lightning speed and efficiency, and one accessible simply by the tap of a single key. The electronic health record is transformative on the delivery of patient care, networking among those involved in patient care, and mining databases for research and educational purposes. Yet by its very intrusiveness and reach, the ease with which it may impose administrative and clerical tasks, its impersonal engagement, and the time it takes away from direct communication with the patient, the electronic health record is widely implicated in the causation of physician burnout. Sieja et al describe their novel strategy and intervention termed “Sprint,” which they designed with the intent of improving the efficiency of the electronic health record in outpatient clinic settings, lessening the clerical and administrative burden placed on clinicians, increasing clinician satisfaction with the electronic health record, and enabling, in general, a greater sense of fulfillment for clinicians in providing patient care. Sprint involved an engagement between designated leaders at the involved clinics and the Sprint team, the latter composed of a project manager, physician and nurse informaticists, and trainers. The Sprint intervention was founded on the triad of instructing clinicians in more effective and efficient use of the current electronic health record; reengineering workflow in the clinic and how it involves various clinicians, disciplines, personnel, and patients; and creating strategies within the electronic health record that are custom-made for a given specialty. Clinicians were surveyed before and after the Sprint intervention was introduced. Such surveys clearly demonstrated that clinicians viewed the electronic health record more positively and used it more effectively in serving patients and delivering medical care. Interventions such as Sprint, as described by Sieja et al, thus hold out hope that the intrinsic power and potential of the electronic health record can be appropriately harnessed such that the electronic health record works for improved patient care, causes less frustration and less dissipative clerical burdens for clinicians, and fosters greater professional fulfillment and satisfaction for clinicians and the health care team.


WOMEN’S HEALTH: PREGNANCY HYPERTENSION AND READMISSION WITH HEART FAILURE

Women’s health and the medicine of sex differences, led by the Section Editor Dr Vesna Garovic, are fields that receive special attention and emphasis in *Mayo Clinic Proceedings*. In the current issue there are two articles on women’s health, the first by Nizamuddin el al addressing cardiovascular complications of pregnancy. Normal pregnancy is characterized by a hyperdynamic circulation: systemic vascular resistance and blood pressure both decrease; circulating blood volume rises substantially; cardiac output increases, driven initially by increase in stroke volume and subsequently by an increase in heart rate; and organs such as the kidney exhibit increased blood flow. Hypertensive diseases of pregnancy, the commonest complication occurring in pregnancy, thus override a necessary physiologic vasodilatory response that occurs in normal pregnancy. The occurrence of hypertensive diseases of pregnancy causes substantial morbidity and mortality, to a large part, because of adverse effects on the heart.
These adverse effects of hypertension on the myocardium occur because the heart hyperfunctions in normal pregnancy, sustaining as it does a hyperdynamic expanded circulation; the development of hypertension in pregnancy imposes an increased afterload on the myocardium, thereby straining an already stressed and adapting myocardium. The present study by Nizamuddin et al utilized the National Readmissions Database to examine the linkage between hypertensive diseases of pregnancy and the occurrence of heart failure with the attendant need for hospitalization. The findings demonstrate that readmission with heart failure within 90 days of delivery was more likely to occur in patients with hypertensive diseases of pregnancy, and, as compared with patients without heart failure, such hospitalizations occurred earlier, were of greater duration, and entailed increased health care costs. The findings from this study underscore the need for appropriate management of hypertension during pregnancy and in the postpartum period and constant vigilance for symptoms and signs of heart failure, a complication to which patients with hypertensive diseases of pregnancy are unusually prone.


WOMEN’S HEALTH: PROCESS OF CARE FOR FEMALE SEXUAL DYSFUNCTION

The clinician-patient relationship should enable patients to safely disclose and clinicians to effectively address sensitive medical issues. Few issues are as innately sensitive or intimate as those that involve sexual concerns and problems. Challenges in addressing such issues commonly involve, on the one hand, reserve and reticence on the part of the patient, and, on the other, a relative lack of expertise and ease with such discussions on the part of the clinician. Recognizing that female sexual dysfunction (the term used when such concerns progress to the point of imposing emotional distress) is insufficiently recognized and often inadequately managed, the International Society for the Study of Women’s Sexual Health brought together a panel of distinguised experts from relevant disciplines to delineate basic and advanced competencies and a process of care for female sexual dysfunction. These consensus-based recommendations are clearly presented and discussed by Parish et al. Prior to presenting these recommendations, Parish et al discuss the scope and epidemiology of female sexual dysfunction; its terminology and classifications; and its range of symptoms, manifestations, diagnostic criteria, and underpinnings. The crux of the process of care is a model based on 4 key elements: 1) bringing out the patient’s narrative; 2) focusing on the central issue; 3) supporting and affirming with empathy; and 4) developing a treatment plan, with consultation with experts as needed. This process of care is so well developed, encompassing, and articulated by Parish et al that this process of care speaks to and benefits a broad range of clinicians, irrespective of their knowledge of and proficiency in sexual medicine. Parish et al are to be congratulated for their work in generating these recommendations and this process of care. Indeed, while centered on female sexual dysfunction, the concepts and framework outlined by Parish et al are, in many ways, applicable to other sensitive medical issues. Promoting these competencies among clinicians and their facility and ease in engaging in such discussions with patients will engender a more candid dialogue and a greater likelihood that female sexual dysfunction will be more openly addressed and more effectively managed.


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