"The mission of the MEFACOOG is to foster continuing improvements in women's healthcare. The goals of the MEFACOOG are to support Continuing Medical Education – Undergraduate, Graduate and Postgraduate Research Programs; Faculty Development; and Development of Educational Networks in women's healthcare."

Medical Education Foundation of American College of Osteopathic Obstetricians & Gynecologists

Year of 2021

MEFACOOG ANNUAL REPORT

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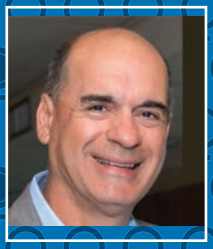
Message from the Chair



F. Miguel Fernandez, DO, FACOOG

Dear members of the Osteopathic OBGYN Community:

Please visit this page for a video message from F. Miguel Fernandez, DO, Chair

Sincerely yours,

F. Miguel Fernandez, DO, FACOOG

Message from Executive Director

Valerie Bakies Lile, CAE, ACOOG (Hon)

Dear Members of the Osteopathic OBGYN Community,

We wish to express heartfelt appreciation for the courage and resilience you have demonstrated over the past two years while continuing to provide excellence in women's healthcare. For this reason, MEFACOOG remains dedicated to quality education and research programs that support your efforts.

This year MEFACOOG established a new endowed lecture and renamed an existing program to honor those whose unwavering support allows us to continue the mission. The newest endowment, the Sages of ACOOG Unity Lecture, will annually honor a leader in the profession, recognizing their specific areas of expertise and commitment to women's healthcare through relevant educational content. The Resident Reporter Program has been designated the Eric J. Carlson, DO Resident Reporter Program. As a member of one of the earliest classes of Resident Reporters and after nearly 20 years of service to ACOOG and MEFACOOG, Dr. Carlson continues to share time, talent, and treasure to ensure future generations of Osteopathic OBGYNs have access to these same educational opportunities.

Engaging young osteopathic physicians is more important than ever in the unified GME environment. Another way we hope to impact education in single accreditation is by continuing to recognize excellence in osteopathic research. MEFACOOG research awards and grants will provide the foundation for bringing osteopathic education principles to the greater OBGYN community and create scholarly activity opportunities for residency and fellowship programs.

Providing exceptional educational experiences is our priority, beginning with medical students, through postgraduate training, and in lifelong learning.

Sincerest Thanks,

Valerie Bakies Lile, CAE, FACOOG (Hon)
Executive Director

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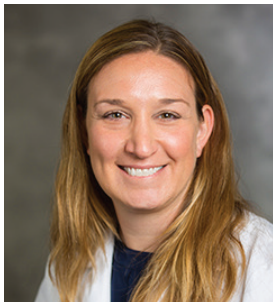

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MEFACOOG/Resident Reporter Scholarship Program

The Resident Reporter Program at the 88th Annual Conference (virtual conference) received commendable contributions from the residents who participated. The top papers given monetary awards and publication in the MEFACOOG Annual Report were:

Cortney Booth, DO - OSU Medical Center - Tulsa, OK
"*Approach To Antenatal Maternal Anemia...It's More Than an Iron Script*"
Article based upon a lecture by lecture by: Eric J. Carlson, DO, MPH, FCACOOG (Dist)

Seth J. Minton, DO - Beaumont Hospital - Farmington Hills, MI -
"*Updated Guidance on Screening and Management of Hepatitis C in Women"*
Article based upon a lecture by lecture by: William R. Short, MD, MPH, AAHIVS

Plan your research project now!

The MEFACOOG Research Grant of up to $5,000 is open to osteopathic physicians or any resident or fellow of an osteopathically recognized ACGME residency or fellowship training program.

MEFACOOG/Resident Reporter Scholarship Program

Approach To Antenatal Maternal Anemia…It's More Than an Iron Script

Cortney Booth, DO

Article based upon a lecture by Eric J. Carlson, DO, MPH, FCACOOG (Dist)

Why is anemia in pregnancy of concern?
The answer is simple. It is a global health problem affecting the lives of many women and can have a detrimental effect on maternal and fetal health outcomes. According to the World Health Organization, approximately 38.2% of pregnant women are affected by anemia globally with the highest prevalence in the South-East Asia and Africa and the lowest in the Western Pacific, the Americas, and Europe[1]. Approximately 25 percent of patients we will meet during the first obstetrical visit will likely have some form of anemia. Dr. Carlson stated, "Anemia is a sign, not a diagnosis." The etiology of anemia should dictate the treatment course, therefore, further evaluation into a correct diagnosis for the cause of anemia should be performed in clinical practice.

According to ACOG, anemia in pregnancy is defined as a hemoglobin less than 11 g/dL and a hematocrit less than 33 percent in the first and third trimester and a hemoglobin less than 10.5g/dL and hematocrit less than 32 percent in the second trimester[2]. While about 30 percent of women at some time in their reproductive live are anemic, pregnancy itself is a risk factor which is secondary to physiologic changes that occur. These changes include a large increase in blood volume with a smaller increase in total red blood cell mass resulting in a dilutional anemia, which can contribute to a challenge in making a correct diagnosis. Specifically, the plasma volume expands by 40-50% and the red blood cell mass expands by 15-25 percent[2]. Secondary to the disproportionate ratio, pregnancy has an increased iron requirement. An additional 1 gram of iron stores are gain in pregnancy[2] [3]. The additional iron is need for the patient to maintain adequate circulation and oxygen delivery to her own organs as well as to the fetoplacental unit that needs a great amount of iron for growth and development[3]. Assessing for maternal anemia is important because decrease blood counts are associated with an increased risk of prematurity, low birth weights, low neonatal iron stores with potential subsequent impaired neonatal neurologic function, and risk of maternal decompensation at birth if postpartum hemorrhage were to occur.

How can we determine the etiology of an anemia?

Simply put: Size. Shape. Color. A common method of categorizing anemia is by mean corpuscular volume (MCV), which would refer to the size of the red blood cells (RBCs). MCV can be further divided into 3 categories: microcytic (MCV less than 80fL), normocytic (80-100 fL), and macrocytic (greater than 100 fL). Mean corpuscular hemoglobin refers to the color of RBCs. Cells are described as hyperchromic, normochromic, or hypochromic. The shape of RBCs can also give a clue into the etiology to anemia. RBCs can take on many shapes including but not limited to target cells, ovalocytes, sickle cells, stomatocytes, and many more. The most common etiologies of anemia are iron deficiency, hemoglobinopathy, megaloblastic, and anemia of chronic disease.

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The following is a discussion of anemia by MCV. Many find this categorization preferable because a complete blood count is recommended to be obtained for every pregnant patient at her new obstetric visit as well as at the visit on 24 to 28 weeks' gestation. Approximately 75 percent of anemia that is found during pregnancy is due to iron deficiency anemia[4]. It is defined by a decreased serum level of iron, an increased total iron-binding capacity, a decreased ferritin level, and less than 18 percent of iron/total iron-biding capacity. Ferritin is an indicator of iron stores and obtaining a ferritin level that demonstrates a decreased level, specifically less than 30 micrograms/L, is 98 percent sensitive and specific for diagnosing iron deficiency[2] [4]. The gold standard for diagnosis of iron deficiency anemia is a bone marrow aspiration but is rarely needed.

The treatment for Iron Deficiency anemia is iron supplementation. This should be instituted to reduce the risk of the previously mentioned adverse outcomes, specifically to prevent poor fetal brain development[5]. Most prenatal vitamins contain an adequate amount of iron for pregnancy but if patients are found to be iron deficiency, supplementation iron should also be taken. There are several oral formulations available in the United States for supplemental iron. One of the most commonly use formulations is ferrous sulfate which contains approximately 60mg of elemental iron per 325 mg tablet[2] [4]. In the setting of mild anemia, oral iron is an appropriate first line treatment compared to intravenous iron because it is usually cost effective and widely available; however, it is associated with gastrointestinal issues which can make patient compliance difficult. If patient compliance is difficult, some studies have shown that weekly iron supplementation can still effectively treat the anemia.

Quick Tip!
Counsel the patients on the best way to take iron. Take iron 30 minutes before meals for maximum absorption. Take with vitamin C to help increase absorption. Additionally, let them know that chronic use of PPI and H2 blockers can decrease absorption[4].

There are clinical scenarios were intravenous iron would be a more appropriate treatment. Examples of this would include, a minimal or absent response to oral iron, poor compliance, severe anemia, the need for rapid treatment in the third trimester, individuals with high risk hemorrhage, and those who are unable to undergo a blood transfusion[6]. There are also multiple preparations of IV iron, including iron dextran, iron sucrose, and ferric gluconate. Iron dextran is rarely used in the United States as it can cause anaphylaxis reaction, thus, the two other preparations are more commonly used as the safety profile is very good.

Quick Tip!
Per ACOG recommendations, we should recommend low dose iron supplementation in all pregnant individuals in the first trimester[2].

Another microcytic anemia that should be considered when evaluating anemia in pregnancy are the various forms of Thalassemia. They occur secondary to defects in the alpha and beta chains of hemoglobin. Beta-thalassemia is the most common form. If a patient has been evaluated for iron deficiency anemia and the results were not consistent with that diagnosis, then it is recommended to consider screening for thalassemia[4]. The treatment of thalassemia and the risks of maternal and fetal morbidity and mortality vary between the different forms.

The majority of anemias encountered in pregnancy are secondary to physiologic anemia as well as iron deficiency anemia, but there are other diagnoses that should

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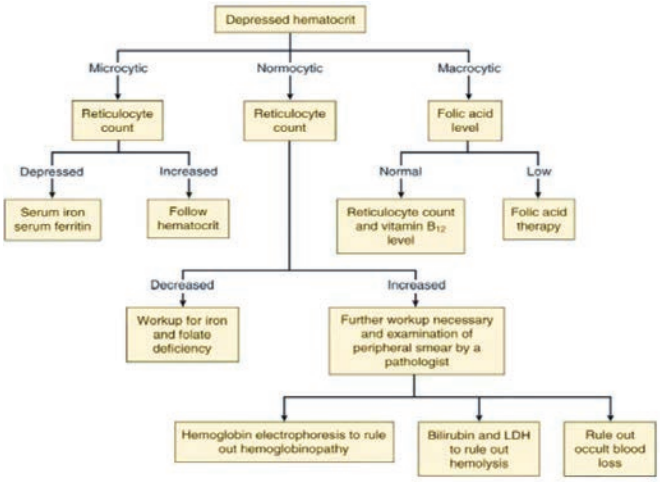

Figure 1. Evaluation of Anemia.

Obstetrics: Normal and Problem Pregnancies. Gabbe, 7th edition.

be on the differential with an elevated MCV. Macrocytic anemia if often categorized by megaloblastic or nonmegaloblastic. On a peripheral smear of a megaloblastic anemia, you would expect to visualize megalocytes and hypersegmentation of neutrophils. A few examples of nonmegaloblastic anemias included ethanol abuse, individuals with liver disease, and drug-induced hemolytic anemias[2]. Folate and vitamin B12 deficiency are causes of megaloblastic anemia and more likely to be encountered in pregnancy than the prior mentioned macrocytic anemias. The differentiation can be made with laboratory testing of levels of methymalonic acid and homocysteine. In vitamin B12 deficiency both are elevated[4]. Treatment of folic acid deficiency can be treated with prenatal vitamins, which contain approximately 1 mg of folic acid, or if higher dosages are needed with folic acid supplements. Adequate folic acid levels are important to prevent neural tube defects. Treatment of vitamin B12 deficiency can be with oral or parenteral preparations.

Case presentation

39 yo G3P1011 female at 3w0d who presents for a scheduled repeat cesarean section with a known complete placenta previa without evidence of an accreta. Her obstetric history is significant for history of one prior cesarean delivery for nonreassuring fetal heart tones, an elevated one hour glucose tolerance test (GTT) but normal 3 hour GTT, herpes simplex virus type 2, and advanced maternal age. Patient was counseled thoroughly on risks, benefits, and alternatives of a cesarean delivery with additional counseling on placenta Previa and association of placenta accrete.

Plan: admit to L&D for scheduled cesarean delivery. Obtain CBC, type and screen, type and cross 2u packed red blood cells, placement of 2 large bore IVs

LABORATORY

CBC		REFERENCE RANGE
RBC	3.74	3.71 – 5.19 M/cmm
Hemoglobin	10.9	11.9 -15.0 g/dL
Hematocrit	32.60%	34.5 – 42.8%
MCV	87.2	80.0 – 100.0 cmic
MCHC	33.3	31.7 -35.5 g/dL

Patient did well in the postoperative period and estimate blood loss was approximately 500mL for her cesarean delivery. Patient was at an increased risk for hemorrhage in the setting of a known complete placenta previa with an 11 percent risk of an accreta, even if not seen on imaging. Fortunately, she did not have a hemorrhage. This case is a reminder that evaluating anemia and treating it prior to delivery where there can be significant blood loss is of the utmost importance.

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Although anemia is common, vigilance in diagnosing and treating the various anemia types is important. The impact one makes on maternal and fetal health is great and the risks to under treating could be tragic. Patients should welcome treatment options that will improve their health and augment good outcomes.

References

1. Organization, World Health. WHO recommendations on antenatal care for a positive pregnancy experience. [Online] 2016. file:///C:/Users/Cortneyraye/Downloads/9789241549912-eng%20(1).pdf.
2. Gynecologists, The American College of Obstetricians and. Anemia in Pregnancy . https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2021/08/anemia-in-pregnancy. [Online] July 2008.
3. The Benefits and Risks of Iron Supplementation in Pregnancy and Childhood. Georgieff, Michael K. and Nancy F. Krebs, Sarah E. Cusick. s.l. : Annu Rev Nutr., 2020, Vol. 39.
4. Gabbe, Steven G., et al. Obstetrics: normal and problem pregnancies . New York : Churchill Livingstone, 1991. 0323321089.
5. Geogieff, Michael K. Iron deficiency in pregnancy. American Journal of Obstetrics & Gynecology.
6. [Online] October 2020. https://www.ajog.org/article/S0002-9378(20)30328-8/fulltext.
7. Antepartum and postpartum anemia: a narrative review. Butwick, A. J. and McDonnell, N. . s.l. : International Journal of Obstetric Anesthesia , 2021, Vol. 47. https://www.obstetanesthesia.com/article/S0959-289X(21)00043-1/fulltext.
8. Approach to Antenatal Maternal Anemia. Carlson, Eric J. . Virtual : ACOOG 88th Annual Conference, 2021.

MEFACOOG/Resident Reporter Scholarship Program

Updated Guidance on Screening and Management of Hepatitis C in Women

Seth Minton, DO

Article based upon a lecture by William R. Short, MD, MPH, AAHIVS

Case Presentation:

A 27 year G3P2002, with no reported significant past medical history, presents to the clinic at 12w3d for her first prenatal visit and to discuss results of previously collected labs. This clinic has instituted universal Hepatitis C Virus (HCV) screening upon establishing prenatal care, in accordance with the Centers for Disease Control and Prevention (CDC) 2020 screening recommendations[1]. The patient is noted to be HCV antibody (Ab) positive. Reflex HCV viral load testing demonstrates chronic HCV infection. The patient has never been screened for HCV and is unaware of her diagnosis. On further questioning the patient admits to a history of intravenous drug abuse, though she has not used in several years. The patient is concerned about her diagnosis and wants to know the pathogenesis, implications on her current pregnancy, risk of vertical transmission, and treatment options.

Though traditionally thought of as a disease of the "Baby Boomer" generation, HCV now poses a great threat to patients of all ages. The number of HCV cases has nearly tripled since 2010, especially in 20 to 39-year-olds; likely due in part to the opioid epidemic[2]. For this reason, it is important that all obstetrician-gynecologists (OB-GYNs) have a clear understanding of the HCV disease process, screening guidelines, diagnosis, appropriate counseling, and management of infected patients. Dr. Short's lecture at the 88th annual American College of Osteopathic Obstetricians and Gynecologists (ACOOG) Spring Conference concisely details each of these topics in a way that can be immediately applied to one's own practice.

According to the CDC 2019 Viral Hepatitis & HIV Surveillance Reports, after adjusting for case under ascertainment and under reporting, in the United States in 2019 there were an estimated: [2,3]

37,700 Hepatitis A infections,
20,700 Acute Hepatitis B infections,
34,800 new HIV infections,
57,500 Hepatitis C infections

In the United States in 2015 the incidence of Hepatitis A in pregnancy was 1:1000.4 Approximately 25,000 babies were born to Hepatitis B surface antigen (HBsAg) positive mothers in 2008, approximately 5000 were born to HIV positive mothers in 2015, and approximately 0.38% of babies in 2015 were delivered by mothers infected with Hepatitis C[5,6,7]. A study by the National Health and Nutrition Examination Survey with data collected from 2013-2016 reported that approximately 1.7% of people in the United States are HCV Ab positive. In the same study, 1.0% were HCV RNA positive, indicating chronic HCV infection. Those who were chronic HCV carriers were more likely to be male, non-Hispanic Black, aged 40-59 years, and were born between 1945-1965[8]. Of the patients that are infected with HCV, 54-86% will fail to spontaneously clear the infection and develop chronic HCV[9]. For this reason, it is imperative to perform HCV viral load testing on all patients with a positive HCV Ab. There are multiple HCV genotypes, though most new infections in the United States (73.7-83.3%) are Genotype 1[10,11]. Patients with chronic HCV develop hepatic inflammation, which can lead to hepatic fibrosis. This hepatic fibrosis can then progress

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to cirrhosis (20% in 20 years) with a subsequent development of hepatic carcinoma (2-4% per year) and hepatic decompensation (2-5% per year)[9]. Patients may also develop extrahepatic complications including chronic fatigue, joint aches, diabetes, lymphoma, and more.

Due to the progressive nature of HCV, it is essential that screening be performed in the appropriate populations. Current recommendations state that all adults aged 18-79 years should be screened for HCV (USPSTF, Grade B)[12]. The American Association for the Study of Liver Disease (AASLD) and the Infectious Disease Society of America have also recommended a one time, opt-out, routine screening of all individuals aged 18 and older (Grade I, B) and screening for all pregnant women ideally at the initiation of prenatal care (Grade IIb, C)[13]. The CDC recently updated their recommendations to include screening with each pregnancy (except in settings where the prevalence of HCV infection is <0.1%) in addition to the existing recommendation for one-time screening for all adults aged ≥18 years[1]. Annual screening should also be performed for all active injection drug users and men who have sex with men (Grade IIa, C)[13]. It is important to recognize and screen any patients with increased risk; including those born between 1945-1965, patients with HIV, patients that received clotting factors made before 1987, blood transfusion/transplant recipients before July 1992, hemodialysis patients, children born to HCV positive mothers, known exposure to HCV, and unexplained elevations in alanine aminotransferase (ALT) levels[1]. Co-infection with HIV should always be ruled out as the CDC reports that in 2009 within the United States approximately 21% of all people with HIV tested positive for either a past or present HCV infection[14].

Patients that screen positive for HCV should undergo a thorough pre-treatment evaluation including history of infection and previous treatments, pregnancy screening, alcohol screening, and documentation of all current medications. Positive HCV Ab screening necessitates additional workup including HCV RNA, HCV genotyping, NS5A resistance testing, hepatic function tests, complete blood count, creatinine, Hepatitis A and B serologies, and HIV antibody. It is also important to identify advanced hepatic fibrosis or cirrhosis. Liver biopsy has fallen out of favor and the degree of hepatic fibrosis is now evaluated using serum markers and transient elastography via ultrasound. Patients with cirrhosis should be encouraged to start antiviral therapy, be screened every 6 months for hepatocellular carcinoma (HCC) with a liver ultrasound, have an endoscopy to rule out esophageal varices, be staged with a Child Pugh Score to determine disease compensation, and be referred to hepatology as needed[15]. If the patient is pregnant at the time of diagnosis, testing can be postponed until after the delivery. The patient should also be immunized against Hepatitis A and B (with consideration of Hepatitis B antiviral therapy if HBs Ag positive), encouraged to maintain a BMI <25kg/m2, and counseled on the risks of alcohol, acetaminophen, and raw seafood (Vibrio infection).

Treatment is recommended for all individuals with HCV, except pregnant women and those with a limited life expectancy that would not improve with treatment. The new Direct Acting Antiviral therapies are highly effective and much more tolerable than historical treatment options. Requirements for treatment vary in each state and it is the physician's responsibility to determine what those requirements are. Some states restrict access to treatment based on levels of fibrosis and/or sobriety from alcohol/drugs. The goal of HCV treatment is to achieve a viral cure, reduce hepatic fibrosis to delay cirrhosis, and to prevent further

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complications of advanced disease (HCC, extrahepatic disease, and HCV transmission). A viral cure is defined as a sustained virologic response with no detectable HCV RNA for ≥12 weeks from the end of the completed treatment regimen (SVR12). There are multiple dual therapy regimens available, and their treatment duration varies depending on HCV genotype, presence of cirrhosis, and co-infection with HIV. Most regimens consist of a single pill that is taken once daily for about 8-12 weeks.* Patients should be clearly educated on the treatment schedule, proper medication administration, tolerability, and the importance of adherence. Many patients are now being successfully managed with minimal monitoring; receiving all their medications at the initial visit and following up only after the regimen is completed. This regimen should be reserved for the compliant patient with reliable follow up. All patients need repeat HCV RNA testing at 12 weeks to ensure that they have achieved SVR12.

With increasing rates of HCV in women of childbearing age, the American College of Obstetricians and Gynecologists (ACOG) now (as of May 2021) supports universal HCV screening for all pregnant women[16]. Diagnosing HCV in pregnancy provides an excellent opportunity for patient counseling, formation of a treatment plan, and arrangement of appropriate neonatal monitoring. In a study from 1990-2000 the reported incidence of HCV vertical transmission was 4.3% (HCV RNA positive), 8.6% (HCV Ab positive with active injection drug use), and 19.4% (HCV RNA positive and HIV positive)[17]. A meta-analysis published in 2014 reported a 5.8% risk of HCV vertical transmission from HCV Ab positive, RNA positive, and HIV negative women. This risk increased to 10.8% for children of HIV positive mothers[18]. Very little data exists on treatment of HCV during pregnancy, so this is not recommended. Treatment should be initiated in the post-partum period after completion of breastfeeding. All infants born to mothers with HCV will need repeated screening and surveillance for 18 months after delivery[1]. Though little is understood about the vertical transmission of HCV, it does not appear to be associated with HCV genotype, mode of delivery (vaginal 4.3% vs. cesarean 3.0% in 11 studies), or breastfeeding status.19,20,21 Studies have demonstrated that there are no differences in cesarean section vs vaginal delivery rates, mean birth weight, mean gestational period, or mean APGARs.22,23,24 A 2008 study published in the American Journal of Obstetrics and Gynecology did indicate, however, that there is an elevated risk of low birth weight (OR=2.2), mechanical ventilation (OR=2.4), and neonatal intensive care unit admission (OR=2.9) for neonates born to HCV positive mothers[25].

When counseling a patient with HCV it should be emphasized that he/she is at risk for reinfection even if he/she achieves a viral cure. This risk is greatly increased in active injection drug users (6/100 person-years) and men who have sex with men (15/100 person-years)[26]. Patients with a history of HCV will also remain HCV Ab positive for the remainder of their lives. For this reason, it is crucial that they only be screened with HCV viral load testing to avoid confusion.

Early identification of HCV and effective treatment can greatly reduce a patient's future risk of end stage liver disease and mortality. Cases of HCV are increasing among younger generations, and it is imperative that these patients not be overlooked. All OB-GYNs should have a clear understanding of which patients are at risk and who may benefit from screening. This lecture by Dr. Short highlights the achievements of ongoing HCV research and its application in our daily practice. It is an excellent reminder for physicians to continually

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re-evaluate their practices and adapt to the ever-changing medical landscape.

*Current treatment guidelines can be found at www.hcvguidelines.org

Review Questions

A 32y.o. G3P1011 at 16w3d gestation calls the clinic in distress after her initial prenatal labs indicated a positive HCV Antibody. The patient completed a 12-week course of Direct Acting Antiviral therapy for chronic hepatitis C and achieved SVR12 two years prior. What should be the physicians' next steps in the care of this patient?

a. Reassure the patient that she will remain HCV Ab+ for the remainder of her life and no further testing is indicated as she was already successfully treated.
b. Inform the patient that she has been reinfected with HCV and order an Infectious Disease consult.
c. Reassure the patient that she will remain HCV Ab+ for the remainder of her life and order HCV viral load testing to rule out a potential HCV reinfection.
d. Apologize for the order being placed as repeat screening was not indicated in this patient.

Answer: C – All pregnant patients with a PMHx of successfully treated HCV should be screened with an HCV viral load in early pregnancy to rule out reinfection. HCV Ab will remain positive for the remainder of their life and should no longer be utilized for screening.

A 28y.o G1P0010 with a PMHx of active IV drug abuse presents to the outpatient clinic for her annual gynecologic evaluation. At the patient's annual exam last year, her screening labs were negative for GC/CT, Trichomonas, Syphilis, HBsAg, and HCV. The patient reports that she is not currently sexually active and has not had any new sexual partners since her last visit. For this reason, the patient states that she is not interested in repeat STI testing at this time. When is the next time that this patient should be screened for HCV?

a. Only if the patient becomes pregnant, as she has already had a negative HCV Ab screen in the past.
b. The patient should be screened for HCV at today's appointment.
c. Once the patient becomes sexually active with a new partner.
d. No further HCV testing is indicated.

Answer: B – The patient is at high risk of HCV infection due to her active IV drug abuse. The patient should be counseled on her risks and repeat screening should be recommended annually.

References:

1. Schillie S, Wester C, Osborne M, Wesolowski L, Ryerson AB. CDC Recommendations for Hepatitis C Screening Among Adults - United States, 2020. MMWR Recomm Rep. 2020;69(2):1-17. Published 2020 Apr 10. doi:10.15585/mmwr.rr6902a1
2. Viral Hepatitis Surveillance Report, United States, 2019. Centers for Disease Control and Prevention. Published May 2021. Accessed Aug 9, 2021. https://www.cdc.gov/hepatitis/statistics/2019surveillance/pdfs/2019HepSurveillanceRpt.pdf.
3. HIV Surveillance Report, United States, 2019; vol.32. Centers for Disease Control and Prevention. Published May 2021. Accessed August 9, 2021. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.
4. Silasi M, Cardenas I, Kwon JY, Racicot K, Aldo P, Mor G. Viral infections during pregnancy. Am J Reprod Immunol. 2015;73(3):199-213. doi:10.1111/aji.12355
5. Smith EA, Jacques-Carroll L, Walker TY, Sirotkin B, Murphy TV. The national Perinatal Hepatitis B Prevention Program, 1994-2008. Pediatrics. 2012;129(4):609-616. doi:10.1542/peds.2011-2866
6. Nesheim SR, FitzHarris LF, Lampe MA, Gray KM. Reconsidering the Number of Women with HIV Infection Who Give Birth Annually in the United States. Public Health Rep. 2018;133(6):637-643. doi:10.1177/0033354918800466
7. Schillie SF, Canary L, Koneru A, et al. Hepatitis C Virus in Women of Childbearing Age, Pregnant Women, and Children. Am J Prev Med. 2018;55(5):633-641. doi:10.1016/j.amepre.2018.05.029

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8. Hofmeister MG, Rosenthal EM, Barker LK, et al. Estimating Prevalence of Hepatitis C Virus Infection in the United States, 2013-2016. Hepatology. 2019;69(3):1020-1031. doi:10.1002/hep.30297
9. Seeff LB. Natural history of chronic hepatitis C. Hepatology. 2002;36(5 Suppl 1):S35-S46. doi:10.1053/jhep.2002.36806
10. Alter MJ, Kruszon-Moran D, Nainan OV, et al. The prevalence of hepatitis C virus infection in the United States, 1988 through 1994. N Engl J Med. 1999;341(8):556-562. doi:10.1056/NEJM199908193410802
11. Sherman KE, Rouster SD, Chung RT, Rajicic N. Hepatitis C Virus prevalence among patients infected with Human Immunodeficiency Virus: a cross-sectional analysis of the US adult AIDS Clinical Trials Group. Clin Infect Dis. 2002;34(6):831-837. doi:10.1086/339042
12. Moyer VA; U.S. Preventive Services Task Force. Screening for hepatitis C virus infection in adults: U.S. Preventive Services Task Force recommendation statement. Ann Intern Med. 2013;159(5):349-357. doi:10.7326/0003-4819-159-5-201309030-00672
13. AASLD-IDSA HCV Guidance Panel. Hepatitis C Guidance 2018 Update: AASLD-IDSA Recommendations for Testing, Managing, and Treating Hepatitis C Virus Infection. Clin Infect Dis. 2018;67(10):1477-1492. doi:10.1093/cid/ciy585
14. People Coinfected with HIV and Viral Hepatitis. Centers for Disease Control and Prevention. Reviewed September 21, 2020. Accessed August 9, 2021. https://www.cdc.gov/hepatitis/populations/hiv.htm
15. Bräu N. Evaluation of the hepatitis C virus-infected patient: the initial encounter. Clin Infect Dis. 2013;56(6):853-860. doi:10.1093/cid/cis957
16. Hughes, BL, Jamieson DJ, Kaimal AJ, Caughey AB, Eke A, McReynolds M. ACOG Practice Advisory: Routine Hepatitis C Virus Screening in Pregnant Individuals. American College of Obstetricians and Gynecologists. Published May 2021. Accessed August 9, 2021. https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2021/05/routine-hepatitis-c-virus-screening-in-pregnant-individuals#
17. Roberts EA, Yeung L. Maternal-infant transmission of hepatitis C virus infection. Hepatology. 2002;36(5 Suppl 1):S106-S113. doi:10.1053/jhep.2002.36792
18. Benova L, Mohamoud YA, Calvert C, Abu-Raddad LJ. Vertical transmission of hepatitis C virus: systematic review and meta-analysis. Clin Infect Dis. 2014;59(6):765-773. doi:10.1093/cid/ciu447
19. Dal Molin G, D'Agaro P, Ansaldi F, et al. Mother-to-infant transmission of hepatitis C virus: rate of infection and assessment of viral load and IgM anti-HCV as risk factors. J Med Virol. 2002;67(2):137-142. doi:10.1002/jmv.2202
20. Cottrell EB, Chou R, Wasson N, Rahman B, Guise JM. Reducing risk for mother-to-infant transmission of hepatitis C virus: a systematic review for the U.S. Preventive Services Task Force. Ann Intern Med. 2013;158(2):109-113. doi:10.7326/0003-4819-158-2-201301150-00575
21. Yeung LT, King SM, Roberts EA. Mother-to-infant transmission of hepatitis C virus. Hepatology. 2001;34(2):223-229. doi:10.1053/jhep.2001.25885
22. Floreani A, Paternoster D, Zappala F, et al. Hepatitis C virus infection in pregnancy. Br J Obstet Gynaecol. 1996;103(4):325-329. doi:10.1111/j.1471-0528.1996.tb09736.x
23. Latt NC, Spencer JD, Beeby PJ, et al. Hepatitis C in injecting drug-using women during and after pregnancy. J Gastroenterol Hepatol. 2000;15(2):175-181. doi:10.1046/j.1440-1746.2000.02060.x
24. Jaffery T, Tariq N, Ayub R, Yawar A. Frequency of hepatitis C in pregnancy and pregnancy outcome. J Coll Physicians Surg Pak. 2005;15(11):716-719.
25. Pergam SA, Wang CC, Gardella CM, Sandison TG, Phipps WT, Hawes SE. Pregnancy complications associated with hepatitis C: data from a 2003-2005 Washington state birth cohort. Am J Obstet Gynecol. 2008;199(1):38.e1-38.e389. doi:10.1016/j.ajog.2008.03.052
26. Midgard H, Weir A, Palmateer N, et al. HCV epidemiology in high-risk groups and the risk of reinfection. J Hepatol. 2016;65(1 Suppl):S33-S45. doi:10.1016/j.jhep.2016.07.012

MEFACOOG Annual Report
- Year 2021 Support

The Medical Education Foundation relies on its members to support its mission.

The mission of the MEFACOOG is to foster continuing improvements in women's health care. The financial review below reflects the year ending December 31, 2021. Below are ongoing grants we hope to continue in the upcoming year.

- MEFACOOG Resident Reporter Scholarship Program-educating osteopathic OB/GYN residents at the ACOOG Annual Conference and reporting back to their programs and to the profession.
- MEFACOOG Awards for Excellence in Poster Presentation-encouraging research and rewarding dissemination via poster presentation at the ACOOG Annual conference.
- MEFACOOG Postgraduate Research Grant encouraging research in osteopathic OB/GYN residency and fellowship programs.

The 88th Annual Conference of the ACOOG hosted three funded lectureships. The Barbara Hawkes Memorial Lecture; also the college's first endowment memorial lectureship, was given by Judy Chang, MD. The MEFACOOG Distinguished Lecture was presented by Elizabeth Krans, MD, MSc. The Distinguished Fellows Lecture was presented by Bonnie Mason, MD. The Past President's Honorary Lectureship was presented by Sandra Valaitis, MD at the 2021 Advances in Women's Health Conference.

The National Student Society of the ACOOG met for the thirteenth during the ACOOG 2021Advances in Women's Health. These projects would not be possible without the support of you, the donors. Thank you for your continuing support.

Financial Review

Statement of Activities

Year Ended December 31, 2021

Support

Corporate Contributions	$25,000
Individual Contributions	$25,431
Interest & Dividends	$32,072
Realized & Unrealized	$63,155
In-Kind Contributions	$57,508
Total Support	**$203,166**

Expenses

Program Services	$7,800
Support Services	$82,392
Total Expenses	**$90,192**

Net Assets, Beginning of Year	$646,711
Change in Net Assets	$112,974
Net Assets, End of Year	**$759,685**

Statement of Financial Position

Year Ended December 31, 2021

Assets

Current Assets

Cash and Equivalents	$35,734
Investments	$726,302
Total Assets	**$762,036**

Liabilities and Net Assets

Accounts Payable	$2,350
Without Donor Restrictions	$710,879
With Donor Restrictions	$48,807
Total Liabilities and Net Assets	**$762,036**

MEFACOOG Awards for Excellence

88th Annual Conference Posters – 1st Place Winner

Prenatal Workshop Significantly Improves Pregnant Women and their Partners' Child-Bearing Skillse

Danielle Lukish, OMS
Ethan Steele, OMS
Catherine Schuller, MD, FACOG

Liberty University College of Osteopathic Medicine, Lynchburg, VA
The Motherhood Collective, Lynchburg, VA

Background

- Historically, prenatal care has focused on individualized care. Recently, group care has shown to be successful in improving birth outcomes[1].
- Group care allows for a 'safe haven' environment for women and their support person to improve knowledge and learn new skills[2].

Hypothesis

- The Motherhood Collective Labor Comfort Measures Workshop will improve pregnant women and their partners' knowledge of and ability to use child-bearing skills during delivery.

Methods

Identify Organization & Workshop
- The Motherhood Collective (MC)
- Labor Comfort Measure Workshop (LCW)

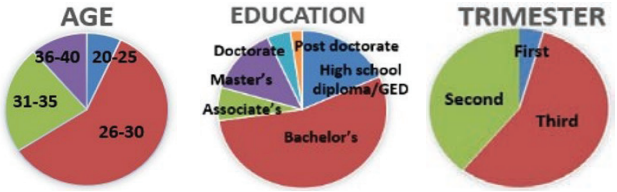
Educate Participants & Administer Survey
- Pregnant Women & Partners
- Pre-Test and Post-Test Questionnaires

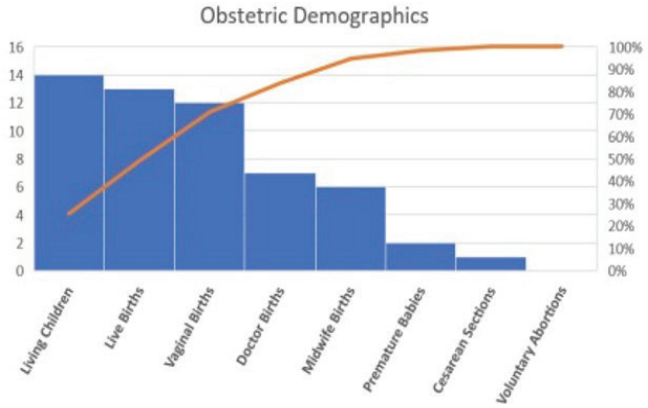
Evaluate Results
- Paired Sample T-tests
- Inform organization & participants

Hands-on group training of the **labor experience** significantly increases pregnant women and their partners' perinatal knowledge and **child- bearing skillset**.

SCAN ME

Results





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LCW Questionnaire Data				
Group	**LCW Score**	*N*	*M*	*SD*
Female	Pre-Test	23	21.826	7.843
	Post-Test	23	36.913	4.747
	Pre-Test	21	18.143	13.059

Paired Sample t-Test				
GROUP	**LCW Score**	*t*	*df*	*p*
Female	**Pre-Test vs Post-Test**	-9.123	22	< .001
Partner	**Pre-Test vs Post-Test**	-6.34	20	< .001
Note: For all tests, the alternative hypothesis specifies that Pre-Test is less than Post-Test.				

Conclusion

- MC-sponsored LCW significantly improved the ability and knowledge of the pregnant women and their partners regarding child-bearing skills.
- Further studies exploring the delivery experience of these couples are indicated to validate the efficacy of LCW.

References

1. Gennaro S, Melnyk BM, O'Connor C, Gibeau AM, Nadel E. Improving Prenatal Care for Minority Women. MCN Am J Matern Child Nurs. 2016 May-Jun;41(3):147-53, doi:10.1097/NCC.0000000000000227. PMID:26854915; PMCID: PMC 4851587
2. Hackley B, Elyachar-Stahl E, Savage AK, Stange M, Hoffman A. Kavanaugh M. Aviles MM, Arévalo S, Machuca H. Shapiro A. A Qualitative Study of Women's Recall of Content and Skills Developed in Group Prenatal and Well-Baby Care 2 Years Later. J Midwifery Women's Health. 2019 Mar;64(2):209- 216. doi: 10.1111/jmwh.12899. Epub 2018 Nov 8. PMID: 30407720.
3. Ickovics JR, Kershaw TS, Westdahl C, Magriples U, Massey Z, Reynolds H, et al. Group prenatal care and perinatal outcomes: a randomized controlled trial [published erratum appears in Obstet Gynecol 2007;110:937]. Obstet Gynecol 2007;110:330–39.

MEFACOOG Awards for Excellence

88th Annual Conference Posters – 2nd Place Winner

Sexual Assault Reporting Amid the COVID19 Pandemic

Alyssa Ensminger, OMS
Rebecca Shaw, MD
Simon Geletta, PhD
Katelyn Myers, DO
Rachel Christenson, OMS

Des Moines University Dept. of Specialty Medicine, Dept. of Public Health, College of Osteopathic Medicine

Objectives

Evaluate the impact of the COVID-19 pandemic on:

1. Reporting rates of sexual assault
2. Proportion of reported cases
3. Proportion of reported cases involving weapons

Methods

The Mid-Iowa Sexual Assault Response Team (SART) provides forensic examinations to sexual assault survivors in central Iowa. This project collected data from the records maintained by the Mid-Iowa SART, with a focus on cases occurring in March through August of 2017-2020. This timeline represents the initial six months COVID-19 began affecting Iowa, with corresponding data from previous years. R statistical programming language was used to calculate the Chi-square goodness of fit test statistics for each objective.

Results

Figure A: Caseload Variation by Year. The overall number of reported cases of sexual assault showed a significant decrease in 2020 compared to previous years (chi-sq = 36.948, df = 3, p-value < 0.001).

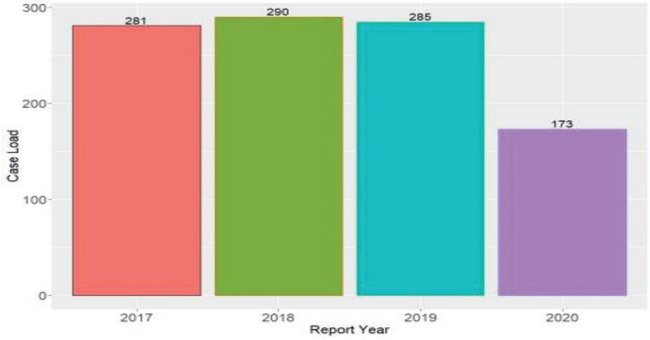


Figure B: Variation in Strangulation by Year. There was a significant increase in the proportion of reported cases that involved strangulation in 2020 compared to previous years (chi-sq = 7.2676, df = 3, p-value < 0.10).

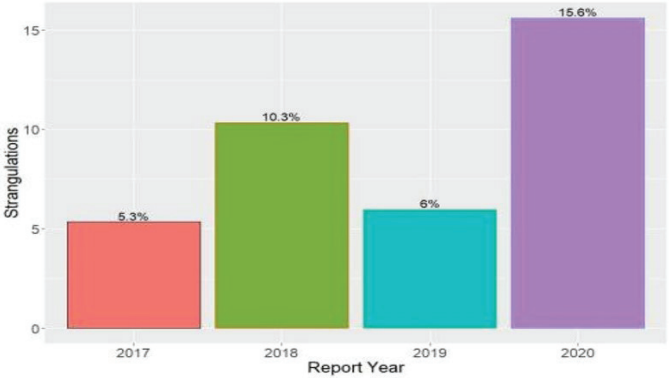
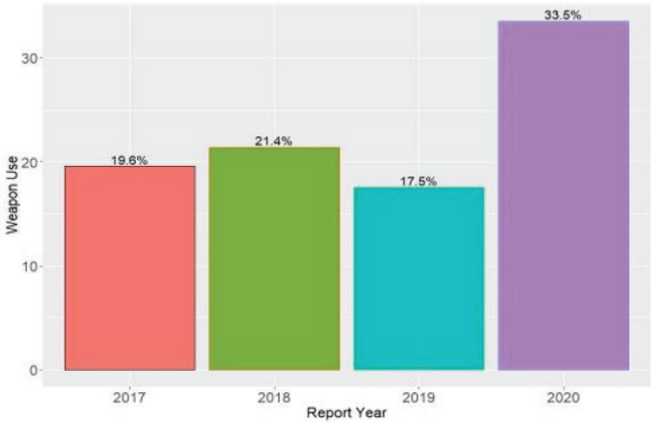


Figure C: Variation in Weapon Use by Year. There was a significant increase in the proportion of reported cases that involved weapons in 2020 compared to previous years (chi-sq = 6.7348, df = 3, p-value < 0.10).



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Conclusion

While reporting rates of sexual assault decreased during the initial six months of the pandemic, the cases reported tended to be more physically violent than those in past years. It is important to emphasize that these results do not necessarily suggest that rates of sexual assault decreased during the pandemic. On the contrary, data from community organizations, such as rape crisis hotlines, show an increase in assault perpetration by intimate partners following stay-at-home orders[1,2]. Together, those studies with the current findings suggest that quarantine-associated increases in sexual assault were met with decreased reports to hospital services. It is vital that these services be prioritized amid other healthcare demands of the pandemic.

Key References

1. Roesch, E., Amin, A., Gupta, J., et al. (2020). Violence against women during covid-19 pandemic restrictions. BMJ, 369, m1712.
2. Tang, K., Gaoshan, J., Ahonsi, B., et al. (2020) Sexual and reproductive health (SRH): a key issue in the emergency response to coronavirus disease (COVID-19) outbreak. Reproductive Health, 17(59).

MEFACOOG Awards for Excellence

88th Annual Conference Posters – 3rd Place Winner

Intraoperative Foley Catheter Tip Exchange and its Effects on Postoperative Urinary Tract Infections Following Gynecologic and Urogynecologic Procedures

Kayla Busuito, DO
Andrew Agosta, MD

Department of Obstetrics and Gynecology Henry Ford Macomb Hospital

Abstract

Objective: Urinary tract infections (UTI) account for up to 40% of all healthcare acquired infections, nearly 80% of UTIs are catheter-associated, and among surgical patients, UTI rates range from 1.8% to 10.4% based on surgery type. The purpose of this study is to evaluate the effect of changing the foley catheter tip intraoperatively after cystoscopy during gynecologic and urogynecologic surgeries on postoperative UTI rates.

Methods: A retrospective chart review identified the gynecologic and urogynecologic procedures involving cystoscopy that were performed at Henry Ford Macomb Hospital from 2/1/2017 to 2/28/2018 or from 3/1/2018 to 3/31/2019. Recorded data included type of procedure performed, patient age, and if a postoperative UTI was diagnosed within 8 weeks of surgery. Primary outcome was postoperative UTI rate. Secondary outcome was postoperative UTI rate when controlling for urogynecologic procedure. Postoperative UTI rates were reported with n (%) with 95% confidence intervals and compared using Chi-square tests.

Results: Pre-policy postoperative UTI rate was 13.66% (n=22, 95% CI: 8.4%-19.0%) and post-policy postoperative UTI rate was 14.19% (n=22, 95% CI: 8.7%-20.0%). There was no statistical difference between the groups (p=0.89). Without controlling for urogynecologic procedures, pre-policy postoperative UTI rate was 12.7% and post-policy postoperative UTI rate was 4.8% (p=0.105). With controlling for urogynecologic procedures, pre-policy postoperative UTI rate was 14.6% and post-policy postoperative UTI rate was 20.7%, although not statistically significant (p=0.30).

Conclusion: Changing the foley catheter tip intraoperatively after cystoscopy during gynecologic and urogynecologic procedures does not have a statistically significant impact on postoperative UTI rates.

Introduction and Objectives

- Rates of postoperative bladder infections, specifically at Henry Ford Macomb Hospital, have been on the rise
- Urinary tract infections (UTI) account for up to 40% of all health-care acquired infections, nearly 80% of all UTIs are catheter-associated, and specifically among surgical patients, rates of UTIs range from 1.8% to 4.1% based on surgery type[1]
- Among urogynecologic patients who undergo mid-urethral sling procedures, UTI incidence ranges from 2.6-10.4% [2, 3]
- Based upon mandatory hospital-performed analyses, rates of postoperative UTIs were found to have an adjusted rate of 3.99% at Henry Ford Macomb Hospital in early 2018
- Multiple etiologies have been hypothesized from preliminary research regarding why the rate has increased and what can be changed in an effort to decrease the rate of post-operative UTIs
- Due to the recent discontinuation of indigo carmine, many clinicians have started using 10% dextrose in sterile water as cystoscopic fluid; but this alteration in clinical practice has led to an increased rate in postoperative UTIs compared with normal saline [4]

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"Intraoperative Foley Catheter Tip Exchange and its Effects on Postoperative Urinary Tract Infections Following Gynecologic and Urogynecologic Procedures"

(Continued from Page 21)

- A few studies have analyzed whether there's an indication for prophylactic postoperative antibiotics following urogynecologic surgeries specifically, but found the UTI occurrence is not lower, and the additional antibiotics were associated with an increase in other adverse events [5, 6, 7]
- A randomized trial by Foxman et al concluded that the use of cranberry extract capsules during the postoperative period following elective benign gynecological surgery involving urinary catheterization reduced the rate of UTIs by half [8]
- Another study by Singh et al compared silver-alloy-impregnated suprapubic catheters vs. standard suprapubic catheters and found a 5% difference in 6-week UTI rates between those who received standard vs. silver-alloy suprapubic catheters, but the study was not powered to detect such a small difference, so no clinically applicable conclusion could be drawn [9]
- Additional studies are necessary to determine which interventions can be employed to reduce rates of postoperative UTIs
- This issue is very prevalent because urinary tract infections are the most common cause of hospital-acquired infections, infection is a frequent complication of urogynecologic surgery, and the use of indwelling urinary catheters is a predisposing factor for their development [4, 5, 10]
- It's well established that hand hygiene and proper aseptic insertion techniques are crucial determinants in prevention of catheter-associated UTIs [11]
- Henry Ford Macomb Hospital mandated a nursing policy change March 2018, requiring exchange of the foley catheter tip intraoperatively after all cystoscopies performed during gynecologic and urogynecologic surgeries to improve post-operative outcomes
- This purpose of this study is to compare exchanging the foley catheter tip after cystoscopy versus the prior policy of not requiring exchange, and whether doing so has had a significant effect on the rates of postoperative UTIs
- **Hypothesis:** intraoperative foley catheter tip exchange after cystoscopy during gynecologic and urogynecologic procedures decreases the rate of postoperative UTIs

Methods

- Institutional Review Board provided expedited review (IRB No. 13307) on 9/26/2019
- A retrospective chart review identified the gynecologic and urogynecologic procedures involving cystoscopy that were performed at Henry Ford Macomb Hospital from 2/1/2017 to 2/28/2018 or from 3/1/2018 to 3/31/2019
- Inclusion criteria: adult female patients who have undergone a urogynecologic or gynecologic procedure at Henry Ford Macomb Hospital which involved cystoscopy from 2/1/2017 to 2/28/2018 or from 3/1/2018 to 3/31/2019
- Exclusion criteria: none
- Recorded data: type of procedure performed, the patient's age at time of surgery, and whether a UTI was diagnosed within 8 weeks of surgery
- This time frame was chosen because a recent study published in July 2019 by Jung et al, found that more than one third of UTIs after urogynecologic surgery occur between 6 weeks and 90 days postoperatively, with a majority (78.4%) occurring at 8 weeks [12]
- Urinary tract infection = urine culture obtained via either mid-stream clean catch or straight catheterization with isolation of any pathogen >100,000 colony-forming units/ml, or having urinary symptoms

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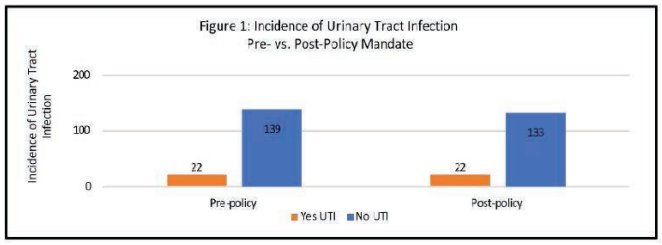
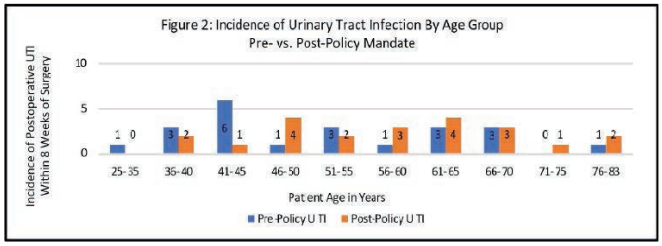
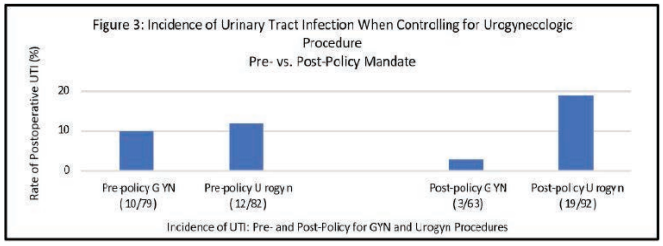
suggestive for infection and receiving treatment without obtaining a urine culture
- Primary outcome: rate of postoperative UTI
- Secondary outcome: rate of postoperative UTI when controlling for urogynecologic procedure
- Postoperative UTI rates for both pre- and post-policy periods were reported with n (%) with 95% confidence intervals and compared using Chi-square tests; subject age was compared using Student's t test

Figures







Results

- 161 pre-policy subjects identified from 2/1/2017 to 2/28/2018; mean age 53.1 years (n=161, SD=12.63)
- 155 post-policy subjects identified from 3/1/2018 to 3/31/2019; mean age 54.4 years (n=155, SD=13.2)
- There was no statistical difference regarding age between the pre- and post- policy groups (p=0.12)
- Mean age for patients was 52 years for pre-policy UTIs, and 59 years for post-policy UTIs
- Pre-policy postoperative UTI rate was 13.66% (n=22, 95% CI: 8.4%-19.0%)
- Post-policy postoperative UTI rate was 14.19% (n=22, 95% CI: 8.7%-20.0%)
- There was no statistical difference between the groups (p=0.89)
- For patients that did not undergo a concomitant urogynecologic procedure, the postoperative UTI rate was 12.66% in the pre-policy period and 4.76% in the post-policy (p=0.105)
- For patients that did undergo a concomitant urogynecologic procedures, the UTI rate was 14.63% in the pre-policy period and 20.65% in the post-policy period, although not statistically significant (p=0.30)
- For patients without undergoing a concomitant urogynecologic procedure the UTI rate is lower in the post-policy period, while for patients with a concomitant urogynecologic procedure the UTI rate is higher in the post-policy period, although neither are statistically significant

Discussion

- Primary outcome: exchanging the foley catheter tip intraoperatively after cystoscopy does not have a statistically significant impact or reduction on the rate of postoperative UTIs
- Rate of postoperative UTI following foley catheter tip exchange was lower in patients

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≤ 50 yrs (12.79% vs 9.59%), but higher in patients
- > 50 yrs (14.67% vs 18.29%)
- In younger patients, it may be beneficial to exchange the foley catheter tip following cystoscopy, but it should not be exchanged in older patients as it may increase their risk of acquiring a postoperative UTI
- Secondary outcome: rate of postoperative UTI was increased if the foley catheter tip was exchanged intraoperatively after cystoscopy when undergoing concurrent urogynecologic procedure, although not statistically significant
- Foley catheter tip exchange may be beneficial in patients only undergoing a gynecologic procedure, but it shouldn't be exchanged in those undergoing a concurrent urogynecologic procedure as it may further increase their risk of acquiring a postoperative UTI
- Wei et al's randomized controlled trial found that the rate of UTI was much higher in patients that underwent mid-urethral sling repair as opposed to those that did not (31.0% vs 18.3%) [13]
- Combined pelvic organ prolapse surgery and stress urinary incontinence surgery has further increased UTI rates than either procedure alone (12.8% vs 5.8-6.5%) [12]
- Our data is consistent with this data, as the rate of post-operative UTI in patients undergoing a urogynecology procedure was higher in both pre- and post- policy timeframes than for gynecologic surgeries alone (14.63-20.65% vs 4.76-12.66%)
- Possible etiologies for the increased risk of postoperative UTI in surgeries including a mid-urethral sling procedure: increased surgical length, repetitive urethral manipulation, and higher rates of postoperative urinary retention requiring prolonged catheterization [5]
- Sanaee et al's systematic review found that postoperative antibiotic prophylaxis with oral nitrofurantoin showed a non-significant reduction in UTI after mid-urethral sling surgery compared with controls [5]
- ACOG acknowledges the possible role for antibiotic prophylaxis in patients with prolonged postoperative catheterization but makes no definite recommendation
- Limitations: the sample size wasn't large enough to achieve statistical significance, this study did not standardize the intraoperative sterile technique utilized, and patient comorbidities were neither reported nor taken into consideration regarding their effects on post- operative UTIs
- Risk factors: presence and duration of catheterization, female gender, catheter insertion outside of the operating room, other active sites of infection, diabetes, malnutrition, and presence of ureteral stents [1]
- Selection bias: some of the subjects included in that data analysis for the post-policy period were labeled with having a postoperative UTI based on their symptoms, but a urine culture was ultimately negative
- Self-selection bias: unable to account for subjects who may have presented to other healthcare facilities outside of the Henry Ford Health System with urinary symptoms suggestive for infection

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References

1. Ramanathan R, Duane TM. Urinary tract infections in surgical patients. Surg Clin North Am. 2014;94(6):1351-68.
2. Vigil HR, Mallick R, Nitti VW, et al. Risk factors for urinary tract infection following mid urethral sling surgery. J Urol. 2017;197(5):1268-1273.
3. Doganay M, Cavkaytar S, Kokanali MK, et al. Risk factors for postoperative urinary tract infection following midurethral sling procedures. Eur J Obstet Gynecol Reprod Biol. 2017;211:74-77.
4. Siff LN, Unger CA, Jelovsek JE, et al. Assessing ureteral patency using 10% dextrose cystoscopy fluid: evaluation of urinary tract infection rates. Am J Obstet Gynecol. 2016;215(1):74.e1-6.
5. Sanaee MS, Hutcheon JA, Larouche M, et al. Urinary tract infection prevention after midurethral slings in pelvic floor reconstructive surgery: A systematic review and meta-analysis. Acta Obstet Gynecol Scand. 2019;98(12):1514-1522.
6. Garcia-Perdomo HA, Jimenez-Mejias E, Lopez-Ramos H. Efficacy of antibiotic prophylaxis in cystoscopy to prevent urinary tract infection: a systematic review and meta-analysis. Int Braz J Urol. 2015;41(3):412-424.
7. Swartz M, Ching C, Gill B, et al. Risk of infection after midurethral synthetic sling surgery: are postoperative antibiotics necessary? Urology. 2010;75(6):1305-1308.
8. Foxman B, Cronenwett AE, Spino C, et al. Cranberry juice capsules and urinary tract infection after surgery: results of a randomized trial. Am J Obstet Gynecol. 2015;213(2):194.e1.
9. Singh R, Hokenstad ED, Wiest SR, et al. Randomized controlled trial of silver-alloy-impregnated suprapubic catheters versus standard suprapubic catheters in assessing urinary tract infection rates in urogynecology patients. Int Urogynecol J. 2019;30(5):779-787.
10. Saint S, Greene MT, Krein SL, et al. A programto prevent catheter-associated urinary tract infection in acute care. N Engl J Med. 2016;374(22):2111-2119.
11. Barbadoro P, Labricciosa FM, Recanatini C, et al. Catheter-associated urinary tract infection: role of the setting of catheter insertion. Am J Infect Control. 2015;43(7):707-710.
12. Jung CE, Brubaker L. Postoperative urinary tract infection after urogynecologic surgery: timing and uropathogens. Int Urogynecol J. 2020;31:1621-1626.
13. Wei JT, Nygaard I, Richter HE, et al. A midurethral sling to reduce incontinence after vaginal prolapse repair. N Engl J Med. 2012:366:2358-67.

MEFACOOG Awards for Excellence

88th Annual Conference Posters – Honorable Mention

Time to Delivery in Nulliparous Women with and without 5% Dextrose

Jennifer Enos, DO
Thomas Alderson, DO
Carlos Rios-Bedoya, M.P.H., Sc.D. O

Department of OB/GYN at McLaren Macomb Hospital

INTRODUCTION

- The determination of factors that increase likelihood of vaginal delivery is a priority for obstetricians in the United States
- Previous studies have shown a decrease in time to delivery in nulliparous patients with the administration of 5% Dextrose (D5W).
- We hypothesized that the administration of D5W decreases time to delivery in nulliparous women during induction of labor.

OBJECTIVES

- The primary objective was time to delivery in nulliparous women
- Secondary objectives included prolonged labor, chorioamnionitis, and cesarean section rate.

METHODS

- Retrospective chart review study (7/1/18-12/31/18) that examined time to delivery in nulliparous women ages 18-40 y/o during induction of labor with and without 5% dextrose.
- Excluded patients with chronic or gestational hypertension, pregestational or gestational diabetes, Renal disease or Cardiac disease
- 5% dextrose was administered intravenously at 125 mL /hour.
- Time to delivery was calculated in minutes starting at time of admission.
- A student's t-test was used to determine any significant difference in mean time to delivery.
- A multivariate analysis was performed to determine
- for mean difference in time to delivery when controlling for maternal age, race, gestational age, obesity or cesarean section.

RESULTS

- Of the 69 patients, 26 (37.7%) received 5% dextrose and 43 (62.3%) were in the comparison group.
- No significant difference was found between those patients that received D5W and the comparison group 1222.4 (+324.7) and 1110.9 (+453.0) (p=0.277), respectively.
- No significant differences in mean time (minutes) were found (P=0.216) after simultaneously controlling for maternal age and gestational age; neither after separately controlling for c-section (P=0.236) or obesity (P=0.327).
- Patients with a bishop score greater than 6 had a statistically shorter mean time to delivery independent of type of delivery (p=0.006).

Mean Time to Delivery in Nulliparous Women with and without IV 5% Dextrose

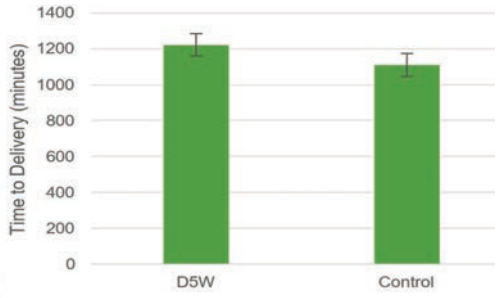

Figure 1: Mean Time to Delivery in Nulliparous Women with and without IV 5% Dextrose

(Continued on Page 27)

"Time to Delivery in Nulliparous Women with and without 5% Dextrose"

(Continued from Page 26)

CONCLUSION

- This study did not show a statistically significant decrease in mean time to delivery with the administration of 5% dextros
- This is in contrast to what has been shown in previous studies (Shrivastava et al, 2009).
- Limitations of this study include small sample size and that this study did not examine for any difference in neonatal outcomes such as hypoglycemia events or hyperbilirubinemia with administration of 5% dextrose.
- More research is also needed to examine factors that allow for a favorable labor curve and decrease labor dystocia as the prevalence of pregnancies affected by obesity and advanced maternal age increases in the United State.

KEY REFERENCES

1. Handa VL Laros RK. Active-phase arrest in labor: predictors of cesarean delivery in a nulliparous population.. 1993 May; 0029-7844 (Print):PMID: 8469468
2. Steingrimsdottir T, Ronquist G, Ulmsten U, WAldenstrom A. Different energy metabolite pattern between uterine smooth muscle and striated rectus muscle in term pregnant women. 1995; 62:241-5.
3. Shrivastava VK Garite TJ, Jenkin SM, Saul L, Rumney P, Preslicka C, Chan K.. A randomized double-blinded controlled trial comparing normal saline with and without dextrose on the course of labor in nulliparas. 2009; 200:379e.1-379e.6.
4. Fong A Serra AE Caballero D Garite TJ Shrivastava VK. A randomized, double-blinded, controlled trial of the effects of fluid rate and/or presence of dextrose in intravenous fluids on the labor course of nulliparas.. 2017 Aug; 1097-6868 (Electronic):PMID: 28322776

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MEDICAL EDUCATION FOUNDATION OF ACOOG

Are you looking for a new way to be involved? Do you enjoy developing innovative educational programs or social philanthropy? Being a MEFACOOG Board Member could be for you! MEFACOOG volunteer leaders can be physicians, educators, non-physician clinicians, spouses/family of ACOOG members, health care industry supporters....anyone with a passion for women's health!

Several positions will be open for nomination this year and we need your expertise. The MEFACOOG Board of Trustees meets twice per year with one meeting usually conducted by phone or web conference. The primary, in-person meeting of the MEFACOOG Board coincides with the ACOOG Annual Conference.

Key MEFACOOG activities include:

- Community Service Projects-past projects include work at a youth community center in Chicago, home repairs in New Orleans for Katrina recovery effort, blood drives, and support for a residential home for pregnant mothers in crisis.
- Resident and Postgraduate Fellow Research Awards and Grants
- Resident Reporter Scholarships provide an opportunity for residents to attend an ACOOG conference and potential article publication
- Resident Education Resources
- Endowed lectureships for CME (Lifelong Learning for attending physicians)
- Support for Osteopathic Continuous Certification (Lifelong Learning, Practice Performance Improvement for attending physicians)
- Fundraising events such as the 'Evening with the Stars' planetarium function and Cirque Du Soleil Mystere

This is just an overview of the potential that exists with MEFACOOG.
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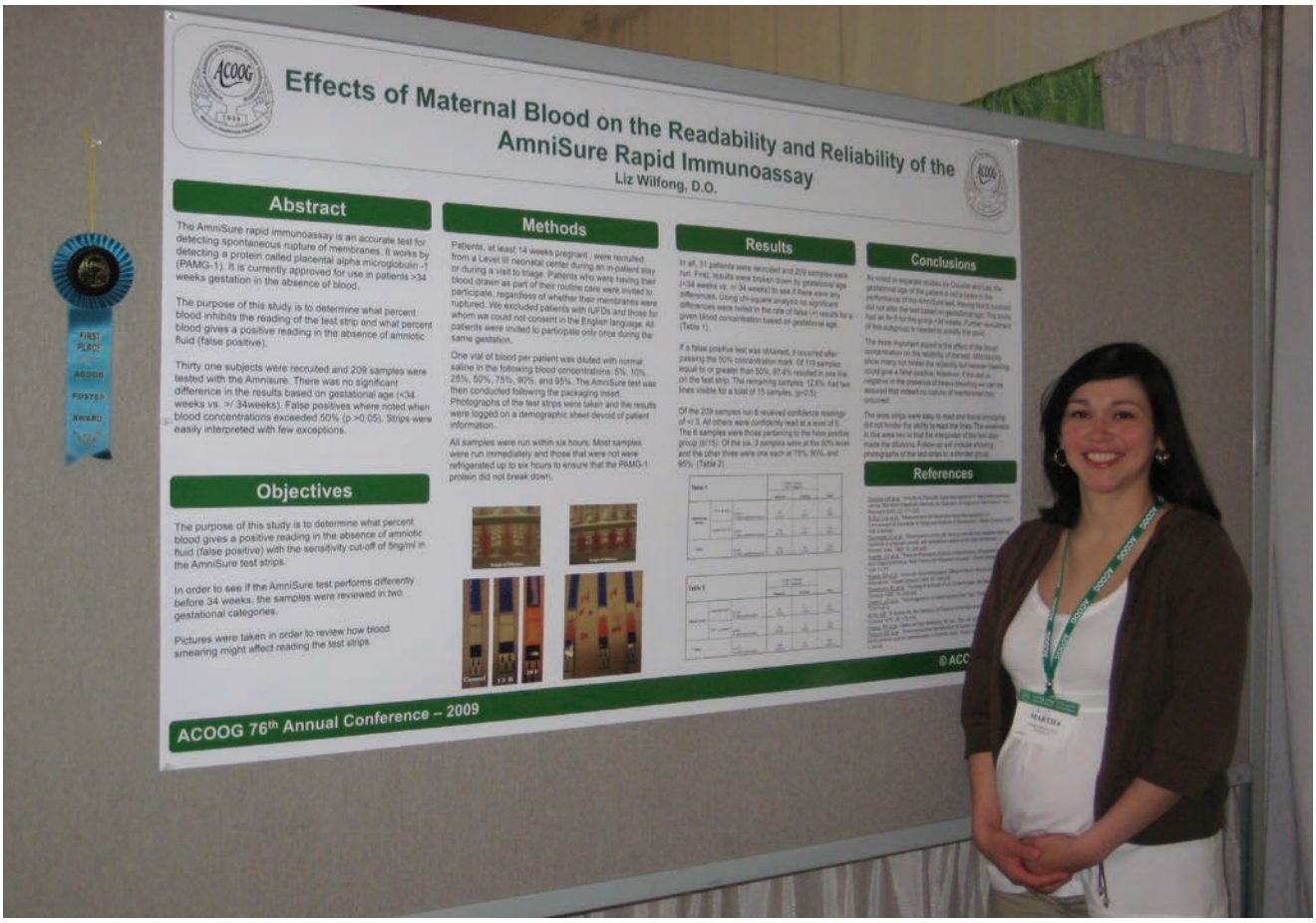
The Eric J. Carlson, DO Resident Reporter Scholarship Program provides a select group of residents the opportunity to attend a scientific meeting they otherwise may be unable to attend. The purpose of the program is to expose the residents to new scientific knowledge and technology in obstetrics and gynecology. The resident in turn, provides a written summary report on that lecture to ACOOG and then reports to the base institution and colleagues on information presented at the meeting . All Resident Reporter Scholarship Program recipients will be publication in the MEFACOOG Annual Report.



SUBMISSION DEADLINE

Abstracts: December 1st, 5 PM (Central Time)
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2022 Advances in Women's Health
September 22-25, 2022
Westin Irving Convention Center
Irving, Texas

Chairs:
Cecilia Banga, DO and Amanda Mirmanesh, DO

90th Annual Conference
March 26-31, 2023
Manchester Grand Hyatt
San Diego, CA

Chairs:
Shania Seibles, DO, JD and Jennifer Caruso, DO

2023 Advances in Women's Health
September 28-October 1, 2023
Westin Peachtree Plaza
Atlanta, GA

Chairs:
Brad Irving, DO and Emmie Strassberg, DO

91st Annual Conference
May 5-10, 2024
Hyatt Regency Coconut Point
Bonita Springs, FL

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MEFACOOG Corporate Partnership Council

Our thanks to these companies for their valuable assistance in partnering with the MEFACOOG to foster continuing improvements in women's health care.

The Corporate Partnership Council of the Medical Education Foundation of the American College of Osteopathic Obstetricians and Gynecologists Mission Statement is:

The mission of the CPC of the MEFACOOG is to enhance and improve the quality of women's health care through collaborative partnerships.

We will accomplish our mission by:

1. Education of:
   - Physicians
   - Residents and other related
   - Health care professionals
2. Increasing industry awareness of the uniquely osteopathic educational model
3. Improving industry access to physicians and the patients they serve
4. Collaboratively identifying, developing and implementing educational programs in women's health care and thereby,
5. Improving the lives of women through education

2020-2021 Corporate Partnership Council (CPC) Members are:

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MEFACOOG Mission Statement

The mission of the MEFACOOG is to foster continuing improvements in women's healthcare.

The goals of the MEFACOOG are to support

- Continuing Medical Education
    - Undergraduate
    - Graduate
    - Postgraduate Research Programs
- Faculty Development
- Development of Educational Networks in women's healthcare

MEFACOOG
ANNUAL REPORT 2021

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