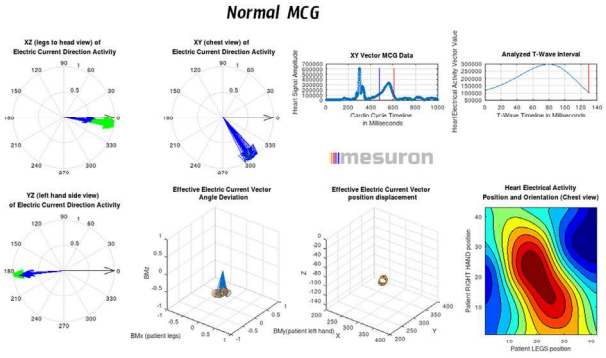
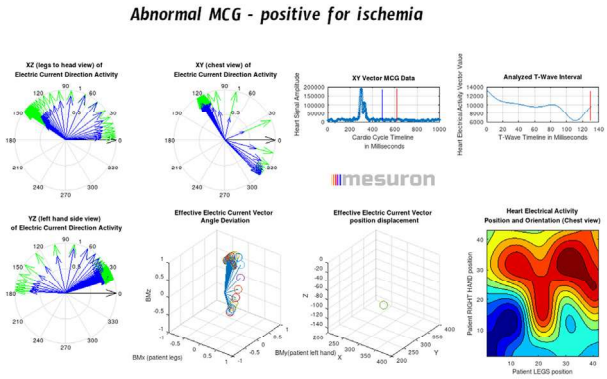
electrical activity of the heart. This results in a prevalence of 23.0%, accuracy of 73.0%, sensitivity of 100% (CI 85.2-100%), specificity of 64.9% (53.2-75.5%), positive likelihood ratio 2.85 (2.1-3.9), negative likelihood ratio of 0.00 (0.0-0.5), positive predictive value of 46% (38.6-53.6%), and negative predictive value of 100% (92.9-100%).

Conclusion: MCG demonstrated high sensitivity in the ED, meaning it can be used to rule out disease. This makes this method a good screening tool for ischemic heart disease among patients with non-diagnostic EKGs. This test is not invasive and may help with disposition and follow up, as it can identify patients with ACS for up to 90 days.





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282 Prevalence, Characteristics, and Outcomes of Patients Who Decline Pulmonary Vascular Imaging During Antenatal Pulmonary Embolism Diagnostics

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Study Objectives: Pulmonary vascular (PV) imaging is often indicated in antenatal pulmonary embolism (PE) diagnostics. Unfortunately, computed tomography, pulmonary angiography, and lung scintigraphy expose the fetus to ionizing radiation, increasing risk of childhood leukemia. Concerned about fetal exposure, some pregnant patients decline PV imaging. Little is known about this phenomenon.

Methods: We undertook a retrospective cohort study of outpatients who underwent antenatal PE diagnostics with D-dimer (DD), compression ultrasonography (CUS), PV imaging across 21 community-based U.S. medical centers from 10/2021—03/2023. We included pregnant persons identified during manual chart review with suspected PE who were recommended PV imaging. We excluded those with COVID-19. We used the pregnancy-adapted Geneva score to estimate PE pre-test probabil (PTP). We compared patients who did and did not consent to PV imaging using bivariate analysis. We used quasi-Poisson regression to calculate adjusted relative risks (aRRs) of consenting with 95% confidence intervals (CIs). We reported incidence of follow-up and PV imaging at 14 days as well as 90-day incidence of venous thromboembolism (VTE) and death in non-consenting patients.

Results: Among 679 outpatients tested for acute PE, PV imaging was recommended for 383 (56.4%). Median age was 30.0 years (interquartile range 25.5-34.5); 49 (12.8%) were in the first trimester, 143 (37.3%) in the second, and 191 (49.9%) in the third. Testing was more common in the emergency department (ED) (n=319; 83.3%) than in obstetric (OB) settings (Labor and Delivery or clinic) (n=64; 16.7%). PTP categories were low, n=216 (56.4%); intermediate, n=167 (43.6%), and high, n=0. Overall, 299 (78.1%) consented to and 84 (21.9%) declined PV imaging, with index PE diagnosed in 5 (1.7%) patients by PV imaging. The 2 groups were not significantly different in race/ethnicity, gestational age, and PTP categories (results not shown). We identified differences in age, gravidity, and diagnostic setting (Table). Setting alone was independently associated with consenting to PV imaging (aRR 1.35 [95% CI 1.18-1.54]; P<0.001), when adjusted for age, race/ethnicity, gestational age, gravidity, and PTP. Compared with patients who consented to PV imaging, those who declined underwent more supplemental testing and less commonly had DD values ≥1 mcg/mL (Table). They also more commonly declined chest x-rays: 22/59 (37.2%) vs 0%, respectively. Twelve of 84 (14.3%) non-consenting patients signed against medical advice. Most non-consenting patients (n=69 [82.1%]) were re-evaluated <14 days. Seven non-consenting patients reported persistent or worsening symptoms on follow-up, 6 of whom were seen <7 days. Two of 7 were recommended PV imaging and subsequently consented (after having declined on the index visit). The 2 delayed studies were negative. No non-consenting patient was diagnosed with VTE or died <90 days.

Conclusion: In this multicenter community study of gravid patients tested for PE for whom PV imaging was recommended, 1 in 5 initially declined. The true incidence non-consent is likely higher as we were unable to include in the study those with suspected PE who underwent neither DD nor CUS. Fortunately, non-consenting patients sought re-evaluation if symptoms persisted or worsened, some of whom subsequently underwent delayed PV imaging. In this low-prevalence population, there were no delayed VTE diagnoses among non-consenting patients. Consenting was significantly more prevalent in OB settings compared with the ED, inviting exploration of interspecialty differences in approaching radiation hesitancy.

Table. Characteristics of gravid patients who did and did not consent to pulmonary vascular imaging during index antenatal pulmonary embolism diagnostics

Characteristic	Patients who consented N = 299	Patients who did not consent N = 84	P-value
Age category, years	n (%)*	n (%)*	0.026
<35	213 (71)	70 (83)	
≥35	86 (29)	14 (17)	
Gravidity			0.024
1	71 (24)	24 (29)	
2	69 (23)	29 (35)	
≥3	159 (53)	31 (37)	
Diagnostic setting, n (row %)			<0.001
ED (n=319)	236 (74)	83 (26)	
OB (n=64)	63 (98)	1 (2)	
Accessory diagnostic tests completed			
Chest radiography	81 (27)	37 (44)	0.006
Compression ultrasonography	80 (27)	47 (56)	<0.001
D-dimer	192 (64)	65 (77)	0.023
D-dimer result, mcg/mL†			0.006
<0.5	3 (2)	3 (5)	
0.5 1.0	55 (29)	30 (46)	
≥1.0	134 (70)	32 (49)	

* n (column %), except diagnostic setting (row %)
† % calculated from n tested with D-dimer in that column

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