

ONGOING QUALITY IMPROVEMENT PROJECT ON PREGNANCY OF UNKNOWN LOCATION RATES IN AN EARLY PREGNANCY ASSESSMENT UNIT

Author & Affiliations : RAISHAM SALEEM ¹(Clinical Fellow Obstetrics and Gynaecology)|SAROJINI BURUGAPALLI ²(Consultant Obstetrics and Gynaecology)

OBJECTIVES

1. To improve Pregnancy of Unknown Location (PUL) rate
2. To engage stakeholders to optimise each step of PUL protocol.
3. To educate sonographers on recognising intrauterine cystic structures and diagnosing PUL appropriately.

METHODS

1. Initial audit identified a PUL rate of 30%.
2. Updated PUL guideline: empty gestational sacs were no longer classified as PUL.
3. Initiated a Plan-Do-Study-Act (PDSA) cycle as part of the Quality Improvement Project (QIP).
4. Re-audit after guideline update showed PUL rate reduced to 15%.
5. Delivered sonographer training through regular educational sessions.
6. Training resident doctors on the PUL protocol.
7. Re-audit post-intervention revealed further reduction to 11.8%.
8. Ongoing monthly multidisciplinary review of PUL cases.
9. Plan re-audit after further refinements.

RESULTS

CONCLUSION

Reducing the PUL rate is vital for alleviating patient anxiety and minimising the financial burden of repeated investigations. Educational interventions and multidisciplinary collaboration significantly improved PUL rates, with further refinements in protocol adherence and ultrasound reporting identified for ongoing improvement.

FUTURE GOALS

- Continue monthly review of PUL cases with specialist doctors and sonographers.
- Regular teaching sessions with resident doctors.
- Re-audit in one year to evaluate sustained improvement



Initial audit revealed PUL rate of 30%.

Re-audit following updated guideline identified PUL rate of 15.2%.

Retraining of unit sonographers and doctors on updated guideline. Re-audit revealed the PUL rate further reduced to 11.8% (61% improvement from baseline). 17/85 (20%) reported “intrauterine cystic structure present.”

Independent Review of 17 cases with “intrauterine cystic structure present”:

- 10/17 (58.8%) of PUL cases has reported as intrauterine pregnancies (IUP).
- 10.4% - adjusted unit PUL rate after reclassification.

Case Review (Re-audit, 85 cases):

1. Ultrasound and blood tests: 85/85 (100%) compliance at initial review (target: 100%)
2. Sequence compliance: 74/85 (87.1%) had ultrasound before blood test (target: 100%)
3. Blood test compliance:
 - a. First tests: 100% had b-hCG; 83.5% had progesterone checked (target: 100%)
 - b. Repeat tests: 67.1% had second b-hCG (target: 100%); 15.3% had second progesterone (target: 0%)