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Registration number:571

Title of the presentation

CONGENITAL ANOMALY POTTERS SYNDROME – “A TALE OF STRUGGLE AND STRENGTH”

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Introduction/ Review of Literature:

Potter's syndrome or sequence, is a condition characterized by a set of physical anomalies resulting from insufficient amniotic fluid, leading to fetal compression and impaired development. often associated with renal agenesis or other kidney abnormalities, which contribute to the reduced amniotic fluid. The consequences of Potter's syndrome include lung hypoplasia, limb deformities, and facial deformities, collectively referred to as "potter's facies."

Aims/ Objectives:

Aims:

1. **To Understand Pathophysiology:** Investigate the underlying mechanisms and causes of oligohydramnios leading to Potter's Syndrome.
2. **To Assess Prenatal Diagnosis:** Evaluate the effectiveness of current imaging techniques in early identification of Potter's Syndrome.
3. **To Explore Management Strategies:** Identify and analyse the best practices for managing pregnancies affected by Potter's Syndrome.

Objectives:

1. **Characterize Clinical Features:** Document the range of anatomical and physiological abnormalities associated with Potter's Syndrome.
2. **Evaluate Risk Factors:** Identify maternal and fetal risk factors contributing to the development of oligohydramnios and subsequent Potter's Syndrome.
3. **Analyze Outcomes:** Study neonatal outcomes and survival rates in infants diagnosed with Potter's Syndrome.
4. **Develop Guidelines:** Propose evidence-based guidelines for prenatal care and intervention strategies for affected pregnancies.

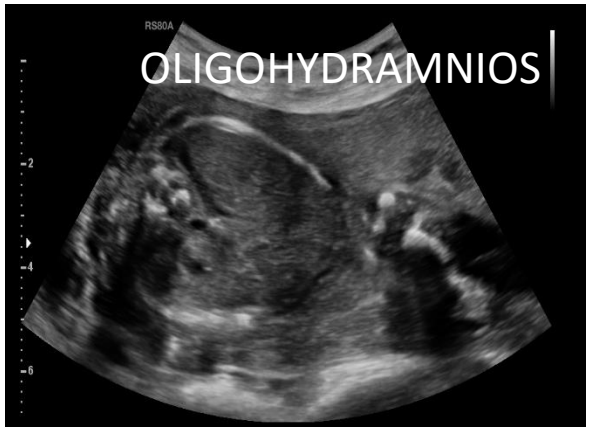
Methodology:

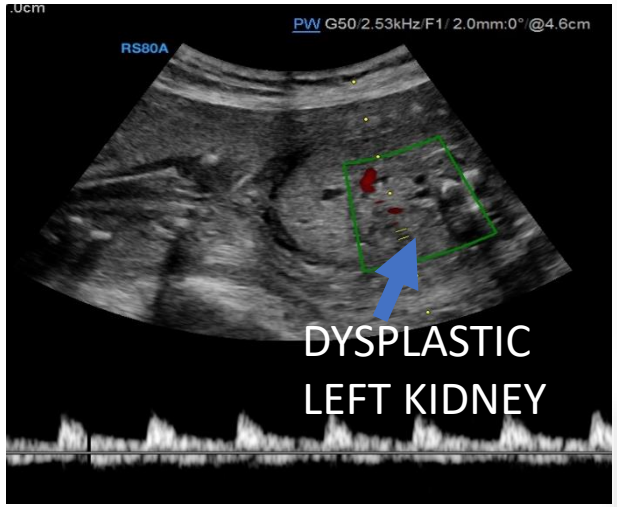
A 30-year-old pregnant female patient with a history of two previous normal vaginal delivery presented to our tertiary care hospital for routine anomaly scan. imaging via ultrasound confirmed a rare diagnosis of potter’s syndrome. By Utilizing ultrasound to assess amniotic fluid levels and foetal development in diagnosed cases & evaluate the accuracy of these methods in early detection. the study aims to contribute valuable knowledge to the understanding Potter's Syndrome, ultimately improving patient care and outcomes

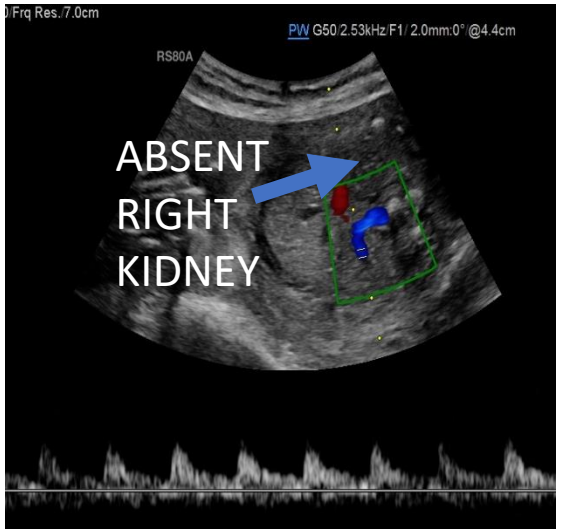
Results:

On ultrasound on 20 weeks there is non visualisation of right kidney with low lying right adrenal gland, left kidney appears echogenic ,urinary bladder not visualised and decreased chest circumference suggestive of pulmonary hypoplasia.

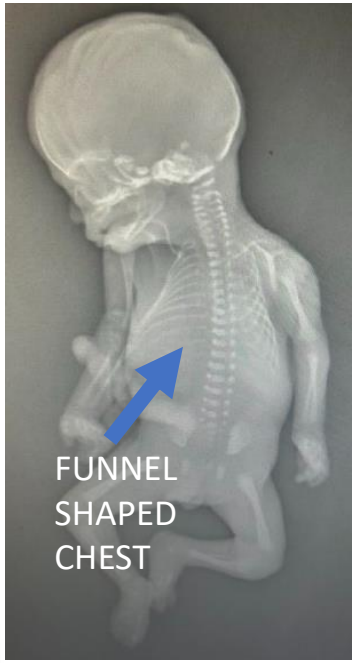
Representative images:

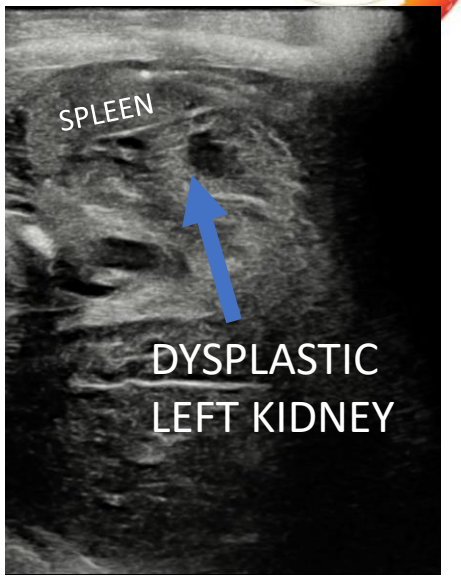




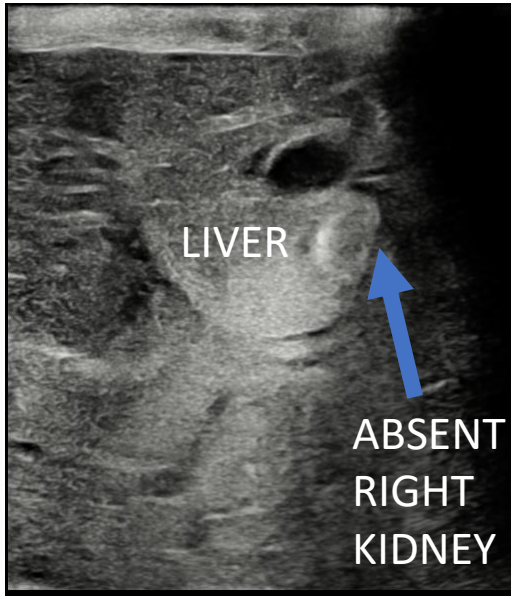


POTTER FACIES





LOW SET EARS



Conclusion:

In conclusion, early diagnosis and intervention are crucial in managing Potter's syndrome. Prenatal imaging and genetic counselling play significant roles in identifying the underlying causes and informing care strategies. While the prognosis remains poor due to the associated complications, understanding the aetiology and improving prenatal care can aid in better outcomes for affected infants. Future research should focus on potential therapeutic approaches and the long-term management of individuals with this condition.

References:

- **Potter, E. L.** (1946). "Congenital malformations of the kidney and urinary tract." American Journal of Pathology, 22(2): 585-625.
- **Lasswell, T. M., et al.** (2016). "Potter's Syndrome and Related Renal Anomalies." Pediatric Nephrology, 31(1): 79-89.
- **Michele, R. M., & Smith, S. D.** (2019). "Potter's Syndrome and Oligohydramnios: A Review of Pathophysiology, Diagnosis, and Management." Journal of Clinical Nephrology and Urology, 15(3): 128-133.

THANK YOU .....