

Embracing MBACE?: Adherence to placental histology examination recommendations in UK single centre

R. Martin¹, E. Bain¹, F. Scriven¹, L. Kirk¹

1 Southmead Hospital, North Bristol Trust, Bristol, BS10 5NB, UK



North Bristol
NHS Trust

Why is this important?

The October 2021 MBACE-UK Perinatal mortality surveillance report recommends placental histology should be undertaken for all babies admitted to a neonatal unit, preferably by a perinatal pathologist, to reduce perinatal mortality.

Our aim...

To assess the adherence of placental histology requesting and reporting in North Bristol Trust to local guidelines (based on Royal College of Pathologists guidance).

Method

An audit of a retrospective cohort of women meeting trust criteria for placental histology examination in July 2021. Criteria included – stillbirth, gestation <30/40, Abnormal antenatal (AN) CTG, APGAR <7 at 5 minutes and Late fetal loss. Women were identified using clinical notes and the trust maternity database. The trust reporting system was used to assess whether placental histology had been requested, the length of time taken for the report to be received, the reporting pathologist and the examination findings. Audit standards: <10% fall outside of local referral criteria, 75% of reports issued within 42 days of receipt.

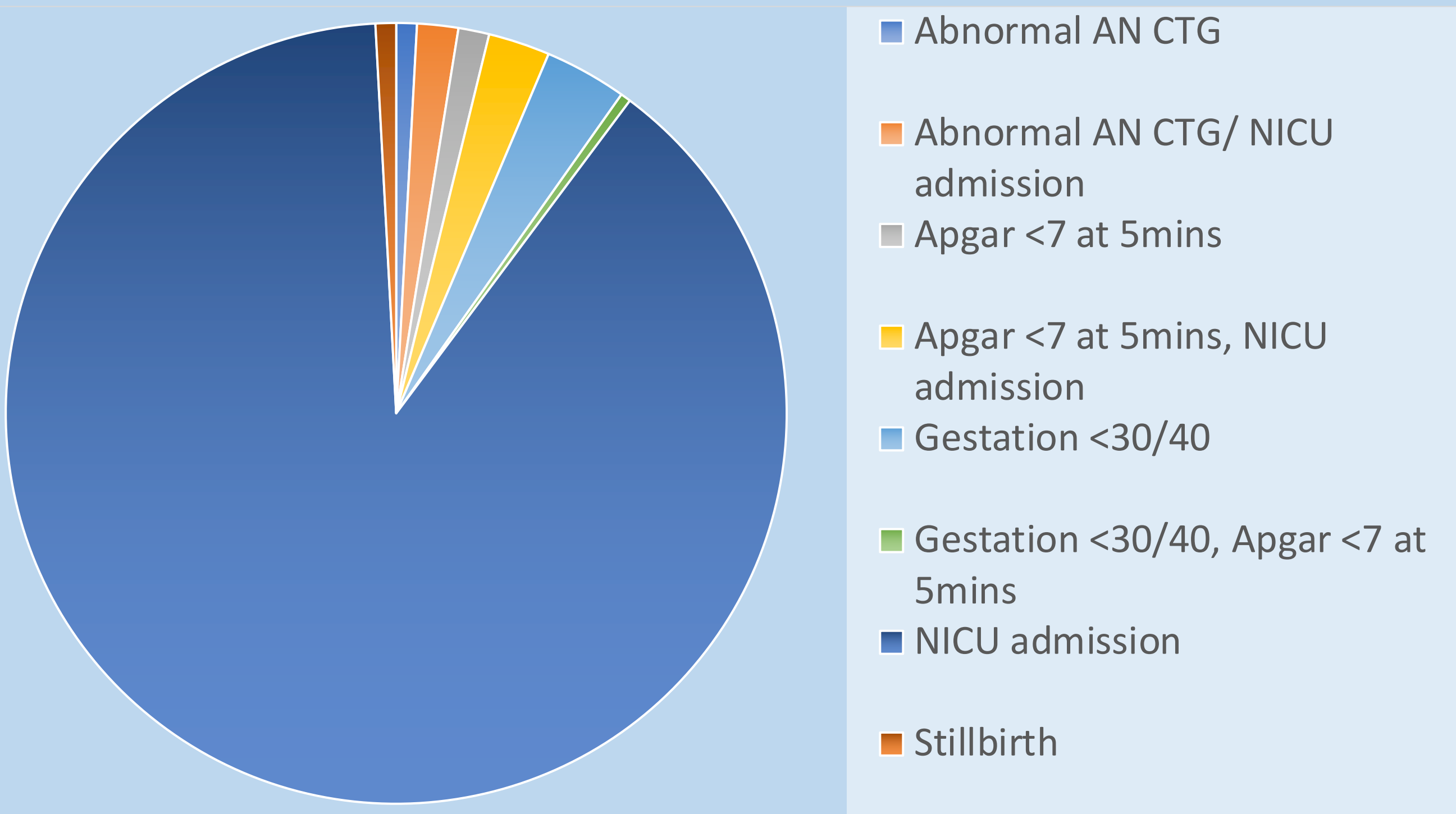
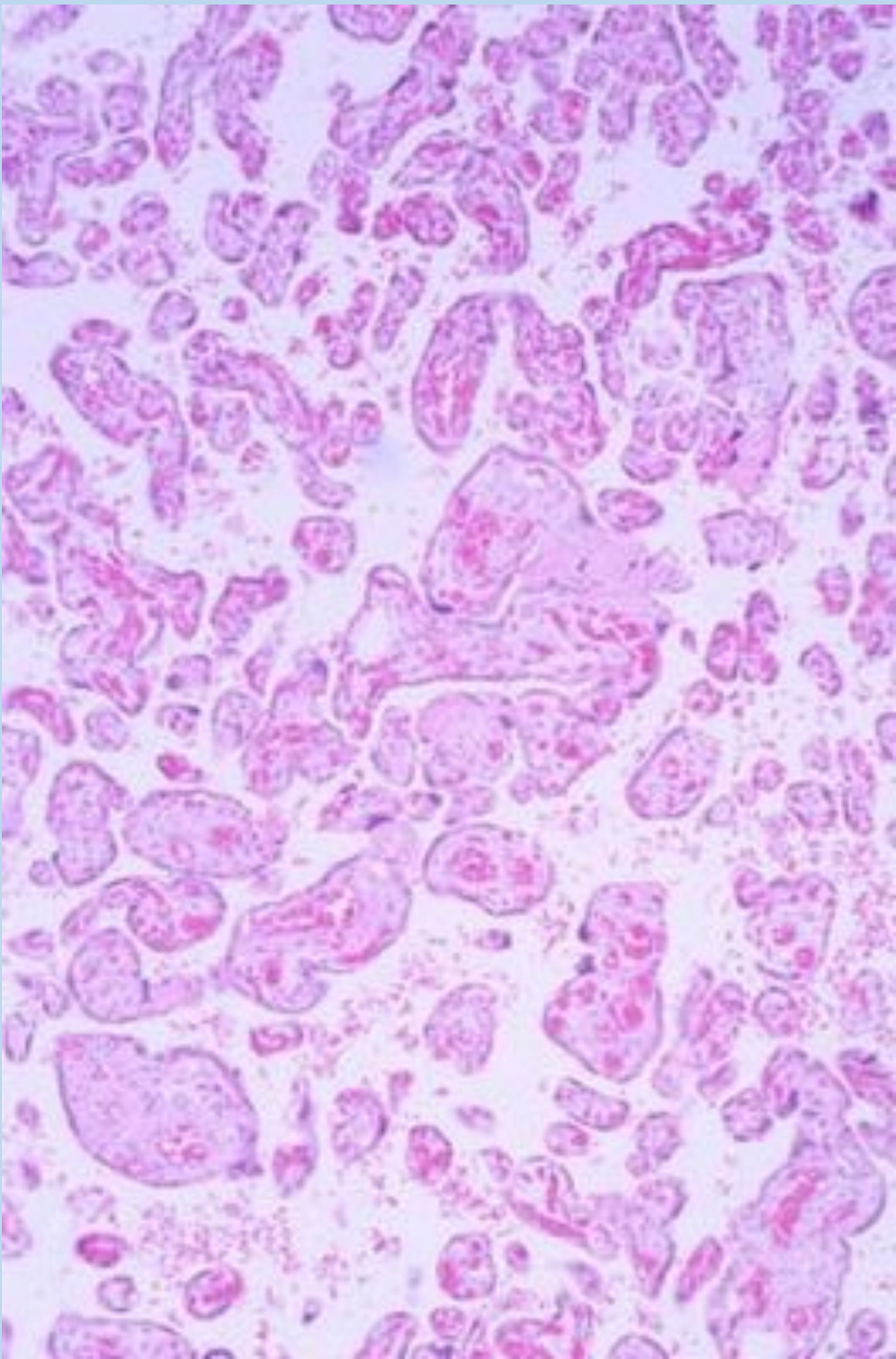
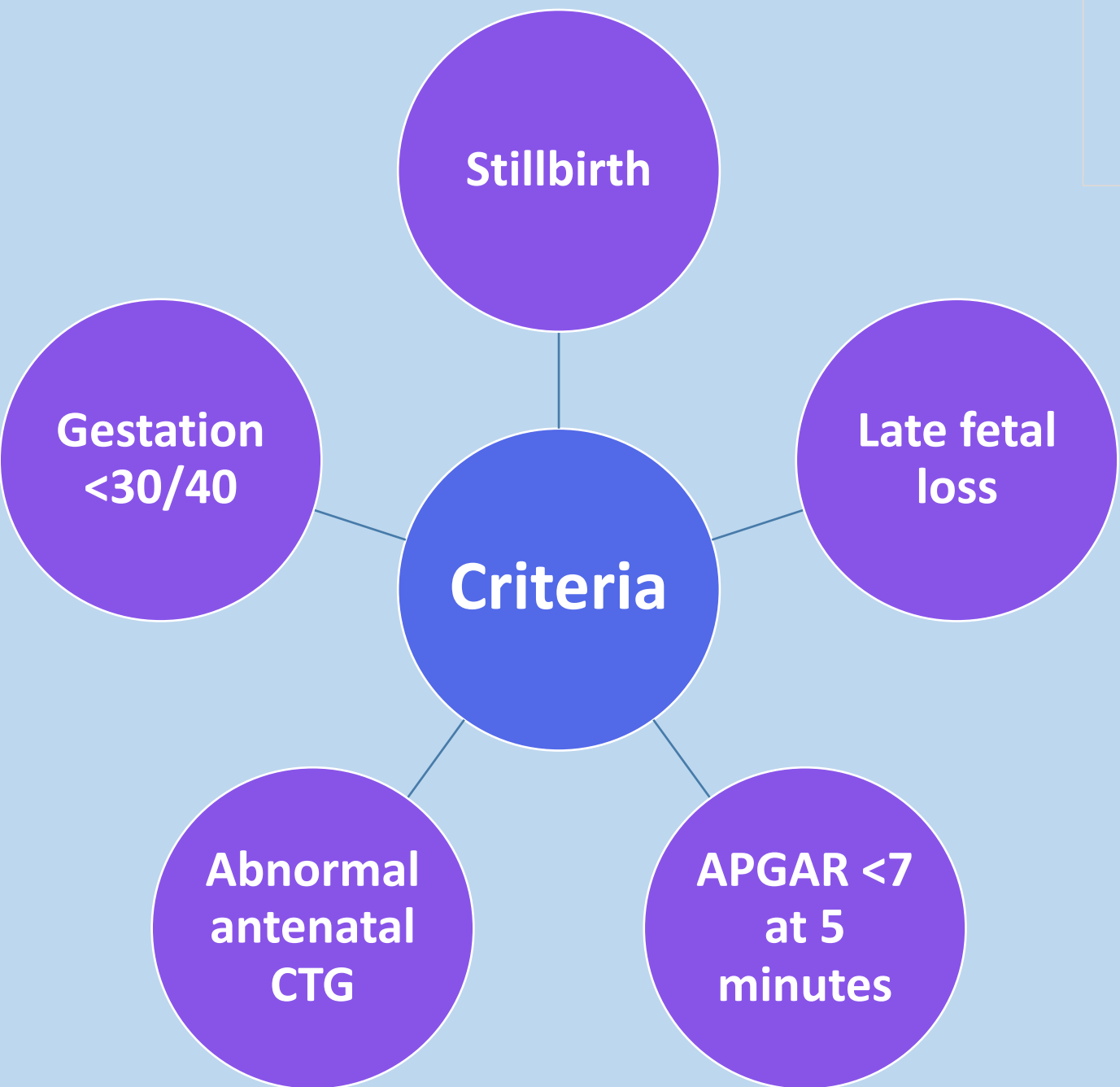


Fig. 1 Pie chart to show the proportion of eligible women fulfilling each criteria

61 eligible placentas were sent (25.96%) - 15 were sent for storage only and not reported (6.38%), 46 sent and reported (19.57%)

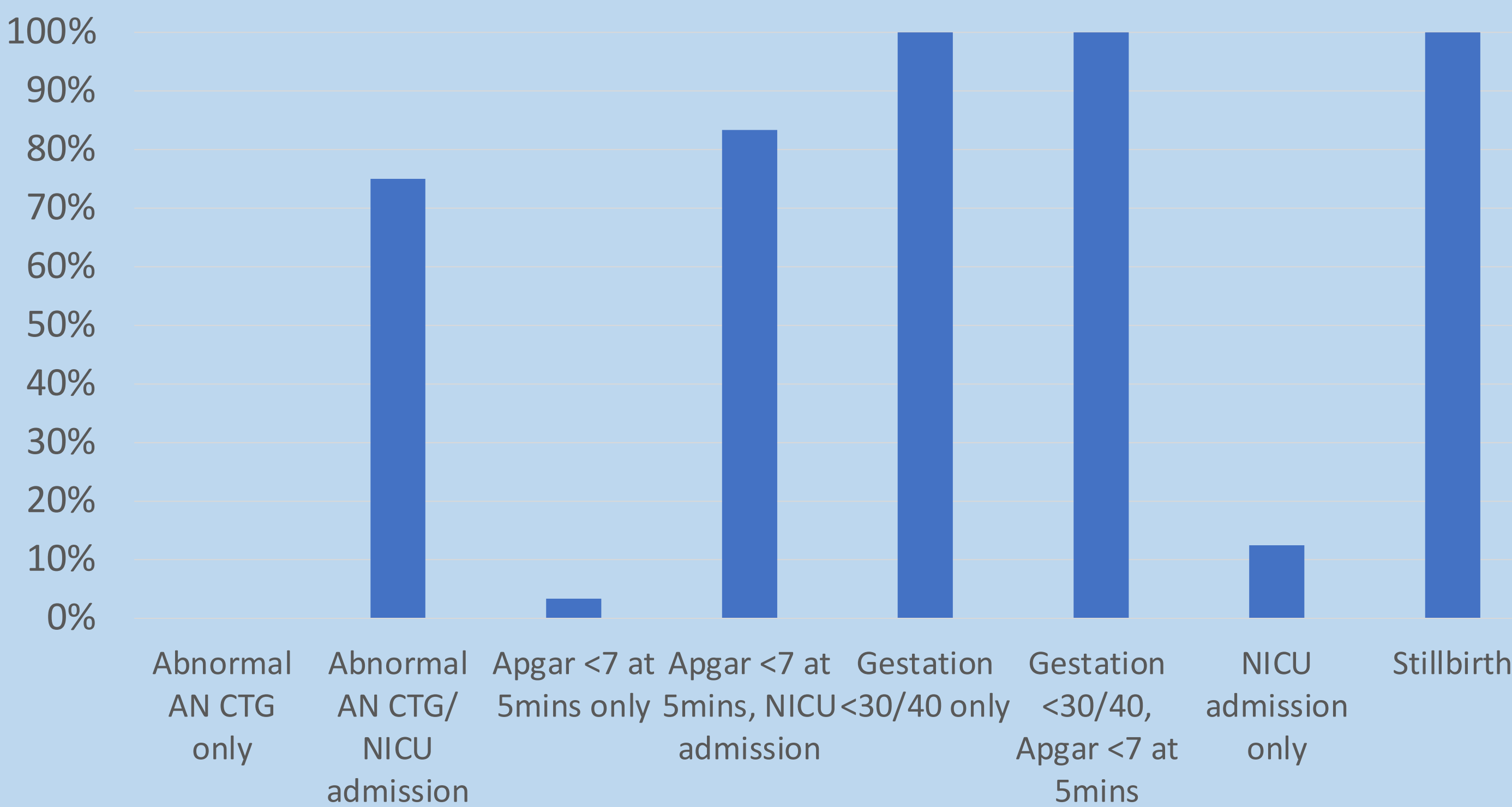


Fig. 2 Bar chart to show the percentage of eligible placentas sent by criteria

44 of the 46 sent and reported were received within 42 days of sending (95.65%). 33 were reported by a trust Consultant perinatal pathologist and 13 were reported by an outsourced pathology service, but the reporting consultant was a perinatal pathologist. Therefore, 100% were reported by a perinatal pathologist. 32 had histological abnormalities detected during examination (60%).

Results

235 women were identified. Of those patients:

- Abnormal AN CTGs: 6 (2.55%). Abnormal AN CTGs only: 2 (0.85%), Abnormal AN CTGs and NICU admission 4: (1.70%).
- APGAR <7 at 5mins: 9 (3.83%). Apgar <7 at 5 mins only: 3 (1.28%), Apgar <7 and NICU admission: 6 (2.55%)
- Gestation <30/40 9 (3.83%). Gestation <30/40 only: 8 (3.40%), Gestation <30 and Apgar <7: 1 (0.43%)
- Stillbirth: 2 (0.85%)
- NICU admission only: 209 (88.93%)

Criteria	Total Number	Number sent (%)
Abnormal AN CTG	6	3 (50%)
Abnormal AN CTG only	2	0 (0%)
Abnormal AN CTG and NICU admission	4	3 (75%)
APGAR <7	9	6 (6.67%)
APGAR <7 only	3	1 (3.33%)
APGAR <7 and NICU admission	6	5 (83.33%)
Gestation <30/40	9	9 (100%)
Gestation <30/40 only	8	8 (100%)
Gestation <30/40 and APGAR <7	1	1 (100%)
Stillbirth	2	2 (100%)
NICU	209	26 sent and reported (12.44%) 15 sent for storage only (7.18%)

Table 1 Table to show breakdown of total number, number sent and percentage of total number by criteria

Conclusion

NBT is not complying with local guidelines or MBACE-UK 2021 recommendations; only a quarter of those eligible have placentas sent for histology, fewer again had complete examination. NICU admissions had the smallest proportion of placental histology examination, despite this being an explicit recommendation. However, all histological examinations were reported by a perinatal pathologist and a very high percentage of examinations were back within 42 days of receipt. By sharing this data with our unit we will highlight the criteria for referral to staff and aim to simplify the referral process before re-audit. However, we are aware that limited numbers of specialist pathologists may make 100% compliance difficult, but we aim to improve referral rates for appropriate cases.