



Placenta praevia elective delivery date; a retrospective audit and re-audit

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Introduction & Background

- Risk of major **antepartum haemorrhage (APH)** necessitating emergency Caesarean, increases rapidly after **36 weeks gestation in women with placenta praevia**.
- The risk of bleeding rises from **4.7%, to 15%, 30%, and 59% at 35, 36, 37, and 38 weeks respectively**.
- Thus, the Royal College of Obstetricians and Gynaecologists' (RCOG) Green-top Guideline No. 27a suggests **elective Caesarean to be considered between 36-37 weeks in asymptomatic placenta praevias** (grade of recommendation C).¹
- This retrospective audit and re-audit explored whether current practice, in a large central London hospital, adheres to recommended guidance .

Design & Methodology

- The gestational age at which asymptomatic placenta praevias were booked for elective Caesarean, were looked at over twelve-months in the initial audit (**June 2019-May 2020**) and over eight-months (**March 2021-November 2021**) in the re-audit, at Chelsea and Westminster Hospital.
- Elective and emergency Caesarean sections due to placenta praevia were identified using the maternity theatres registration books.
- Further information on each of these cases such as details of booking elective Caesarean sections, incidences of APH and respective gestations, were obtained using electronic records such as Evolve, K2 Athens and Cerner.
- Thirty-three cases of placenta praevias were identified between June 2019-May 2020. Thereafter, changes were implemented in the placenta praevia: **Local Cross-site Trust guidelines** and **Patient Information leaflet in March 2020**.
- Following implementation of RCOG recommendations, and changes in the local Trust guideline, the practice was re-audited, and 18 cases were analysed from March 2021-November 2021.

Results

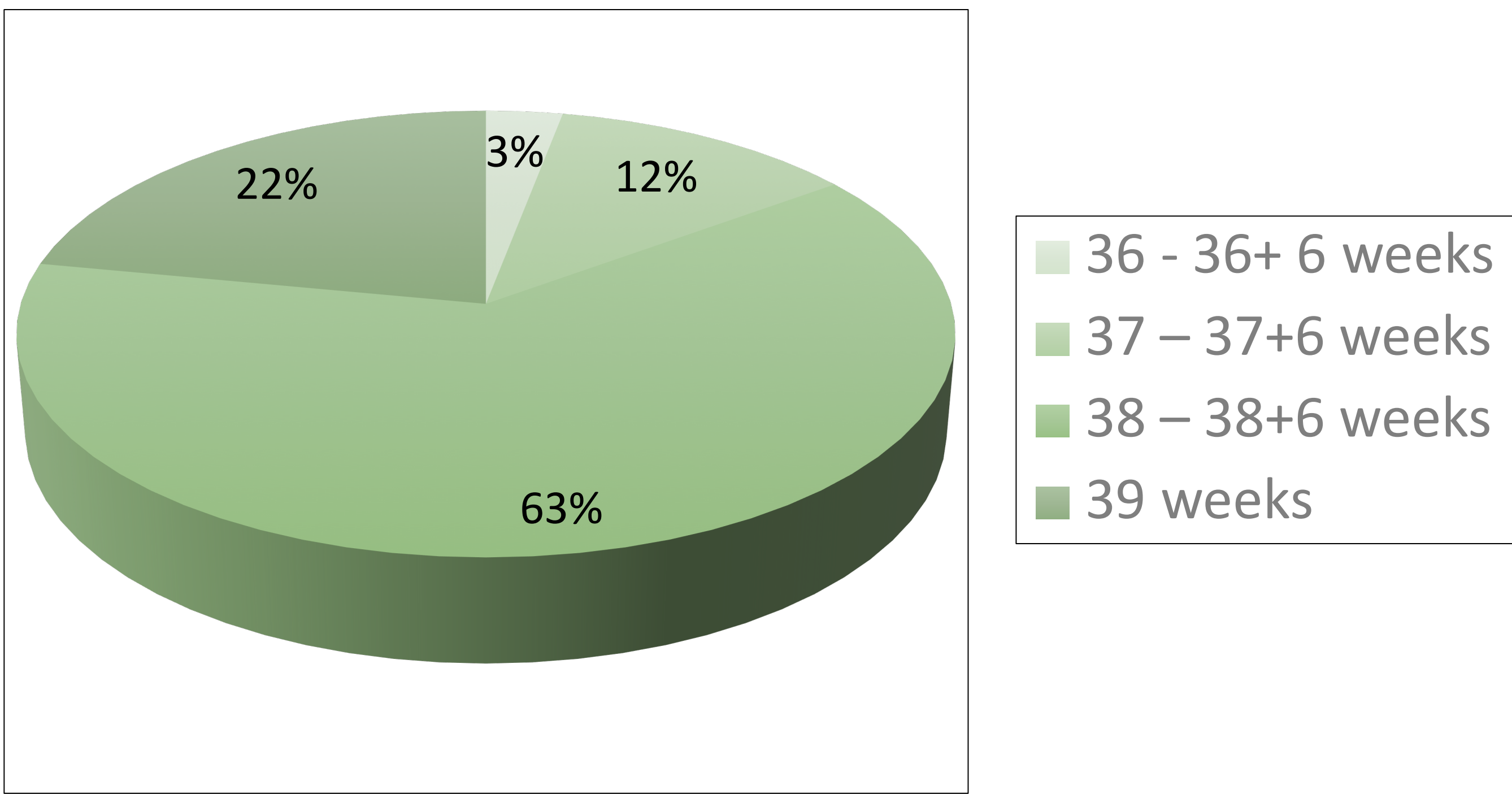
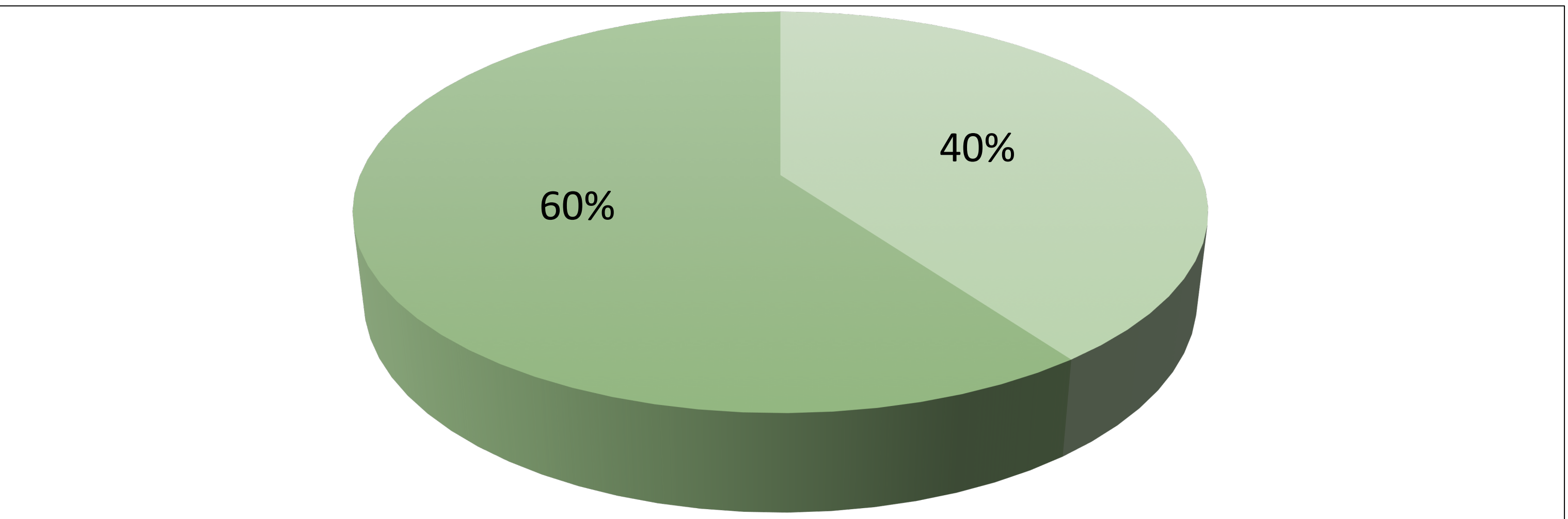


Figure 1: Proportion of Caesarean sections per gestation In the initial audit, Only 3% had elective Caesarean booked between 36 and 36+6 weeks, as per RCOG guideline. A further 12% were booked for an elective at 37-37+6 weeks. The majority (63%) were booked for 38-38+6 weeks, and the remaining 22% for 39 weeks.



■ Antepartum haemorrhage ■ No Antepartum haemorrhage

Figure 2: Proportion of APH in initial audit. 40% of all cases in the initial audit presented with APH needing emergency Caesarean.

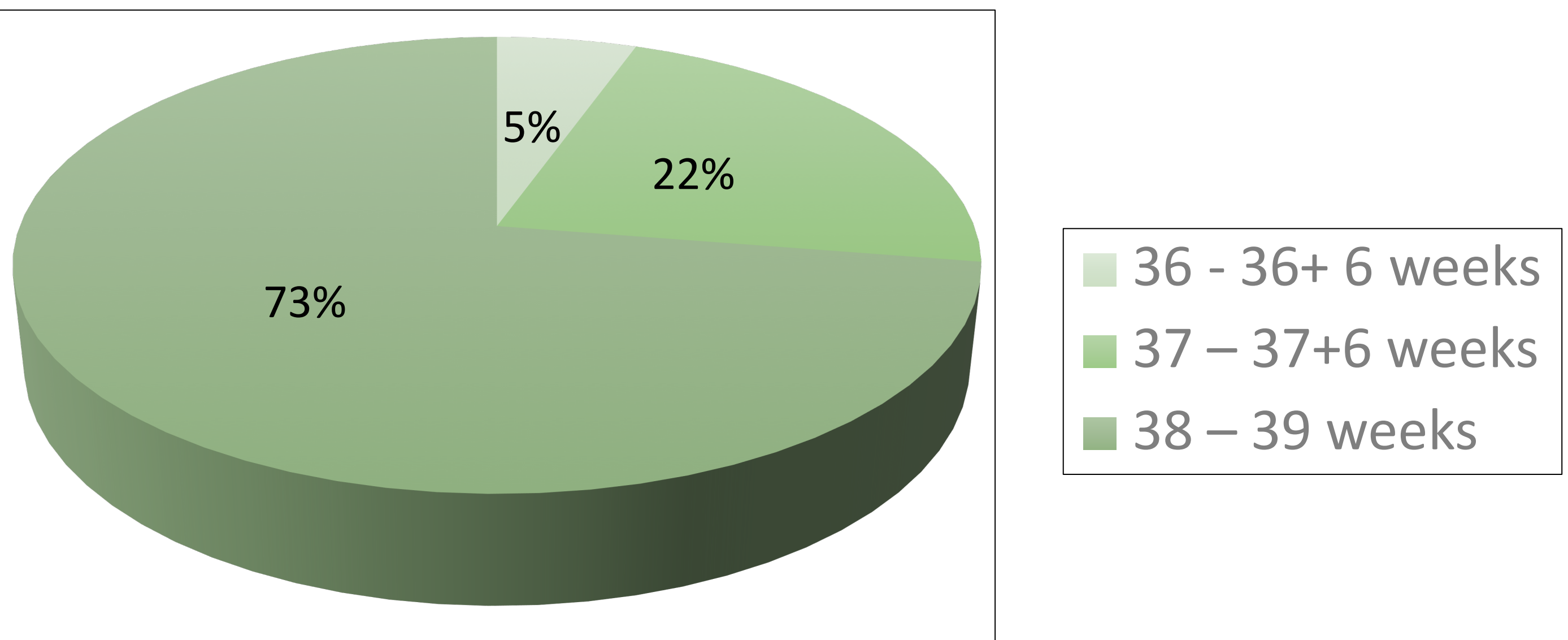
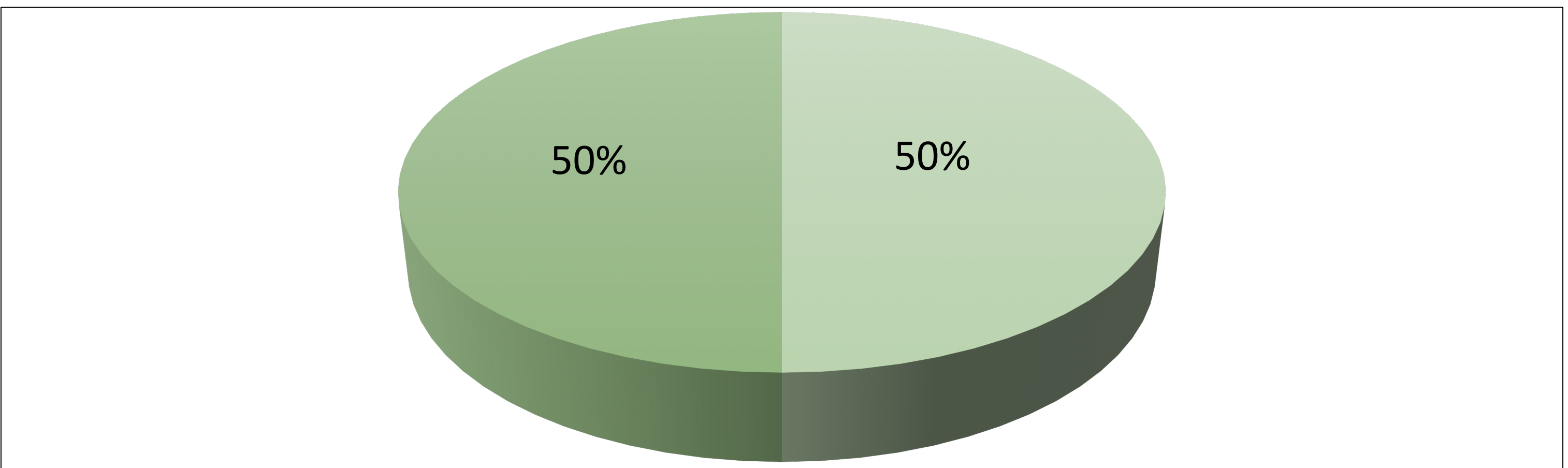


Figure 3: Proportion of Caesarean section per gestation in the re-audit. Only 5.5% had been booked for an elective Caesarean at the recommended 36 to 36+6 weeks, 22% for 37 to 37+6, with the majority (72.5%) for 38 to 39 weeks.



■ Antepartum haemorrhage ■ No Antepartum haemorrhage

Figure 4: Proportion of APH in re-audit. 50% presented with antepartum haemorrhage, requiring emergency delivery.

Audit (no of cases)	Emergency Caesarean (%)	% emergencies ≥36+1 weeks	% emergencies ≥37 weeks
Initial audit (32)	13 (40%)	54% (7)	31% (4)
Current re-audit (18)	9 (50%)	78% (7)	44% (4)
TOTAL (50)	22 (44%)	64% (14)	36% (8)

Table 1: Summary of Emergency Caesarean sections due to APH and gestation. In the initial audit, 40% of the cases presented with APH, needing emergency Caesarean section. 54% of those presented with per vaginal bleeding at or after 36+1 weeks. In the re-audit, 50% of the cases presented with APH, needing emergency Caesarean section. (78% of those presented with per vaginal bleed at or after 36+1 weeks.

Booking elective Caesareans for placenta praevias, at the recommended 36 to 37 weeks, would have prevented at least 31% (initial audit) and 44% (re-audit) of the emergencies.

Discussion & Future Scope

- Both the audit and re-audit indicate **current practice fails to book elective Caesareans at the suggested 36 to 37 week gestation**, for asymptomatic placenta praevias.
- The large number of **emergency deliveries** (40% in the audit and 50% in the re-audit) **can be reduced by at least one third** if clinicians were to adhere to the guideline recommendation.
- This mandates **consideration of each case individually** as well as discussion of the available evidence with the expectant mother, and clear documentation of the decision made.
- All **relevant stake-holders will be informed** of the need for this.
- There will be **continued reinforcement of recommendations** via the updated cross-site placenta praevia guidelines (02.03.2020) and patient information leaflets.
- Finally, another audit is to be performed in 6 months, to assess for improvements in the clinical practice.

References

¹RCOG Placenta Praevia and Placenta Accreta: Diagnosis and Management (Green-top Guideline No. 27a), Royal College of Obstetricians and Gynaecologists; 2018