counselling. A clear framework of common questions and detailed, evidence-based answers could be beneficial when similar cases present to other units.

THE INFLUENCE OF MULTIPLE TRANSFUSION EXPOSURE ON CIRCULATING CYTOKINES IN THE VERY PRETERM NEONATE.

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**Background:** Extremely preterm infants receive on average 3–5 blood transfusions during their primary hospital admission. Transfusions are known to be associated with increased risk of morbidity and mortality, which increases with each subsequent exposure. While the mechanisms underlying this association are unknown, a single transfusion induces an immune response, increasing circulating pro-inflammatory cytokines. The current study aimed to determine the effect of multiple exposures on circulating pro- and anti-inflammatory cytokines.

**Method:** Preterm infants (n = 55) born < 30+0 weeks gestation who had not previously received an ‘elective’ transfusion were recruited. Pro- and anti-inflammatory cytokines were measured in samples collected immediately prior to and 4–6 hours following transfusion and from the transfusion pack by multiplex ELISA.

**Results:** Thirty-seven (67%) infants had at least one transfusion (median = 3, range 1–11). No significant differences in antenatal characteristics were observed according to the number of transfusions. Exposure to a transfusion resulted in increased pro-inflammatory cytokines (TNF?, IL12, IL13, IL27, IL31) as well as cytokines associated with Th17 cell maintenance and inflammatory responses (IL17a, IL17c, IL17F, IL22, IL23 and GM-CSF) (all p < 0.05). Multiple transfusions resulted in baseline increases in IL1?, IL12, IL13, IL31, IL33 and Th17 cytokines (all p < 0.05).

**Conclusions:** Bioactive mediators in the transfusion pack result in increases in a wide array of cytokines following transfusion. Interestingly, the baseline increase in Th17 cytokines that occurs with multiple transfusion, suggest that transfusion exposure induces a change in T cell lineage favouring a Th17 phenotype driving a prolonged pro-inflammatory state.

LATE STILLBIRTH AND POST-MORTEM: MATERNAL DECISION-MAKING IN A NEW ZEALAND STUDY

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**Background:** Knowing the cause of a stillbirth is important to parents and a post-mortem examination is the gold standard investigation. We aimed to identify factors influencing maternal decision-making about post-mortem examination after late stillbirth, through analysis of the New Zealand Multicentre Stillbirth Study data.

**Method:** 169 women with singleton pregnancy and non-anomalous late stillbirth (>28 weeks’ gestation) from seven New Zealand health regions were interviewed within six weeks of stillbirth. We investigated decision-making about post-mortem by asking participants if they would make the same decision again.

**Results:** The majority (99, 58.6%) of women chose a full post-mortem examination, one quarter (47, 27.8%) had a placental examination only, 16 (9.5%) had no investigations and 7 (4.1%) had a limited examination, babygram or MRI. Women who declined a full post-mortem were more likely to be of Maori or Pacific ethnicity (p < 0.001), parity ≥ 2 (p < 0.001), unmarried (p = 0.029) and non-tertiary educated (p = 0.048). The most common (47, 67.1%) reason for declining a full post-mortem was that women ‘did not want baby to be cut’. Ten percent (7/70) of women who declined a full post-mortem examination said they would not make the same decision again; none who consented would have declined a post-mortem (0/99), but two women were unsure about their decision.

**Conclusion:** The finding that no participants in the New Zealand Multicentre Stillbirth Study regretted consenting to a full post-mortem examination when interviewed in the post-partum period, but 10% regretted their decision to decline, may assist parents facing this difficult choice in the future.

RECRUITMENT BARRIERS AND PARTICIPANT FEEDBACK: FINDINGS FROM THE NEW ZEALAND MULTICENTRE CASE–CONTROL STILLBIRTH STUDY

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**Background:** Approaching pregnant and bereaved women to participate in stillbirth research often raises concern. Our aim was to assess factors influencing recruitment in the New Zealand Multicentre Case–control Stillbirth Study and gain insight into how women felt about participation.

**Method:** Eligible women were approached through maternity providers from seven New Zealand health regions between 2011 and 2015. Cases had a singleton non-anomalous late stillbirth (>28 weeks). Pregnant controls were randomly selected and frequency matched for region and gestation. Participants were interviewed by a research midwife and given a freepost feedback form asking their views about participation, which were evaluated using thematic-analysis.

**Results:** A total of 169 (254 eligible) cases and 569 (913 eligible) controls were recruited. Non-participants consisted of: 263 (22.5%) women who declined, 106 (9.0%) unable to be contacted and 60 (5.1%) declined by the maternity provider. Reasons for women declining: no reason provided (166, 63.1%), interview missed or cancelled (42, 15.9%), ‘too busy’ (26, 9.9%), anxiety concerns (11, 4.2%), family declined (10, 3.8%) and other factors (8, 3.0%). Maternity providers declined on the woman’s behalf: no reason provided (26, 43.3%), citing maternal anxiety (22, 36.7%), social/medical concerns (9, 15.0%) and other factors (3, 5.0%). Written feedback was provided by 111 (15.0%). Two main feedback themes, common to cases and controls, were identified: ‘motivation to participate’ and ‘feeling...