**Patient safety issues**

**1. Laboratory error**

HLA typing has always been plagued by difficulties in discriminating similar HLA results and it is difficult to completely mitigate the risk of a similar situation occurring in the future. The clinical impact of reporting HLA results must always be considered. Despite this incident, this laboratory cannot justify the expense and resources necessary to sustain a back-up rapid HLA typing method for the exceptionally rare instances where it would be beneficial. In this case, repeat testing using the same technology would not have resolved the ambiguity. Given that the majority of laboratories nationally are currently using the same kit, referring the sample to a second laboratory for testing would also not have resolved the ambiguity.

**2. Communication of amended report**

The recipient centres were confused by the revised report as the nature of the revision had not been described. The HLA typing laboratory could have been clearer that a high-level revision had taken place. In addition, ODT did not forward the explanatory message provided by the laboratory when forwarding the report.

**Opportunities for shared learning**

Other laboratory tests have similar challenges with insufficient discriminatory accuracy. This case highlights how high the stakes are when rapid turnaround is required, back-up testing is not immediately available and errors may have serious or life-threatening consequences to patients.

In the case of our scenario, helpful actions included: supplying a ‘true positive’ for staff to refer to when ambiguous results are generated; raising awareness of the issues with laboratory staff, ODT and front-line clinical teams; and suggesting a potential solution to the kit manufacturer.

The unclear revised report and the ODT’s failure to forward the explanation are noteworthy. No harm ensued but this was another near miss. Failures in communication or follow-up of critical or unexpected findings is a nationally recognised patient safety risk. And risk is compounded when initial reports are subsequently amended.

A recent Health Safety Investigation Branch (HSIB) report has looked at factors influencing the communication of test results as well as opportunities to mitigate risk of occurrence.1 HSIB’s focus is unexpected significant findings in x-rays, but its recommendations are relevant to all diagnostics. These include the requirement for agreed thresholds for alerting front-line teams of critical or unexpected results, notification of patients after an agreed timeframe, and monitored test result acknowledgement systems.

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