Impact of lameness in dairy cows in the visits to an automatic milking system: a case control study
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There is a tendency worldwide for the automation of farms; this involves the introduction of automatic milking systems (AMS). It is known that half of the dairy population per year in the UK suffer of lameness and it has been recognised it as a painful condition. Affected cows show behavioural signs of being ill and in pain such as reduction in mobility, therefore feeding is reduced and attendance to the AMS can also be compromised; these factors potentially affect not only animal welfare, but also farm economy. The aim of our study is to identify the impact of lameness in the milking behaviour and it was conducted as a case-control study. Thirty eight pairs of Holstein-Friesian cows were used in the study, these were selected using a matching criterion that include mobility score, parity, days in milk (DIM) and milk production, and block by pen. Animals had free access to the AMS and feed; feed was provided at 6:00, 8:30, 10:00, 12:00, 14:00, 17:00 and 20:00 hours. Data collected included number of visits in the last 24 hours and time of the visit. Descriptive analysis and logistic regression modelling were performed. Preliminary results show a significant difference in milking visits between the control and case cows, with a tendency for the control cows to visit the robot more frequently than the case animals (P=0.01). Differences between control and case cows at each time period were explored. The study suggests that lame cows have reduced attendance to visit the AMS and that therefore it may have an impact on animal welfare and farm economics.