



BLACKCURRANT TEST IS A PRACTICAL METHOD TO CONFIRM POSITION OF NASOGASTRIC TUBE

Mariël Klos*¹, Marloes van Laar¹, Marlies Zwerink², Hester J. van der Zaag-Loonen²

¹Dietetics, ² Education centre, GELRE ZIEKENHUIZEN APELDOORN, APELDOORN, Netherlands

Introduction

Recommended methods to confirm the position of a nasogastric tube (NGT) in the stomach are not always successful; sometimes aspirate cannot be obtained, sometimes the pH is higher than 5.5. The Dutch national guideline on gastric tube insertion recommends to make an X-ray when the position of a NGT cannot be confirmed. However, in Gelre hospital the blackcurrant test is done first. This is an inexpensive and easy-to-perform test. Only when the blackcurrant test is inconclusive, an X-ray is performed. In this study we investigated in how many patients the blackcurrant test could confirm the position of the NGT, so that an X-ray could be avoided.

Blackcurrant test

In the blackcurrant test, the patient drinks 50 – 100 ml of coloured lemonade with a low pH (blackcurrant, lemon squash). Thereafter the nurse attempts to obtain aspirate via the NGT, and checks the aspirate for colour and pH. A pH ≤ 5.5 indicates correct placement of the NGT.

Results

69 Tubes in 58 patients were registered (54% female, age 69 ± 14 years). pH-check alone was sufficient to confirm position in the stomach in 40 tubes (58%).

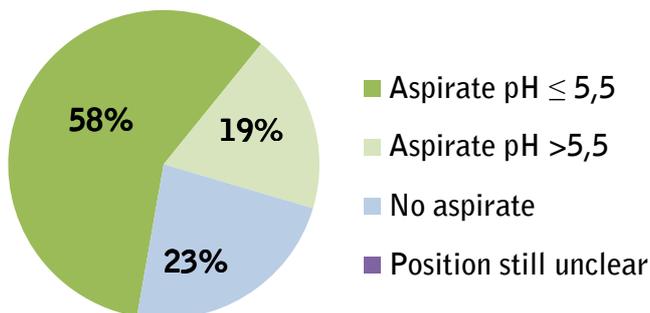
After the additional blackcurrant test, the position of another 24 tubes (35%) was confirmed. From three tubes, still no aspirate was obtained after the blackcurrant test and an X-ray was taken (one tube in stomach, one 'just in stomach' and one in oesophagus). In two patients the blackcurrant test was omitted and x-rays were taken.

Methods

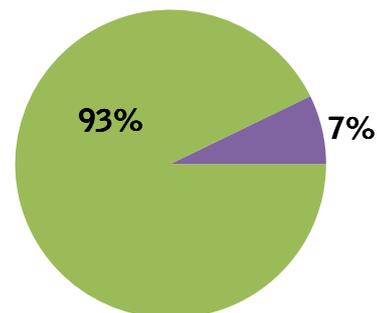
From November 2013 until December 2014, we documented NGTs (10 FG) placed in adults with a safe swallow. We registered whether aspirate could be obtained, pH of aspirate, and whether a blackcurrant test was performed.

Results

pH-check alone



pH-check + blackcurrant test



Conclusions

Performing the blackcurrant test after an unsuccessful pH-check raised the percentage of confirmed NGTs from 58% to 93%. In other words, an x-ray was required in only 7% of NGT placements, while this would have been 42% without the blackcurrant test.

