Uterine contraction induced by Tanzanian plants used to induce abortion

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Abstract

Ethnopharmacological relevance

Women in Tanzania use plants to induce abortion. It is not known whether the plants have an effect.

Aims of study

Collect data on plant use in relation to induced abortion and test the effect of plant extracts on uterine contraction.

Materials and methods

During interviews with traditional birth attendants and nurses, plants were identified. Cumulative doses of plant extracts were added to rat uterine tissue in an organ bath, and the force and frequency of contractions recorded. Acetylcholine was used as positive control.

Results

21 plant species were tested for effect on uterine contraction. 11 species increased the force of contraction, and 12 species the frequency of contractions. The strongest contractions comparable to the maximum response obtained with acetylcholine were obtained with extracts of Bidens pilosa, Commelina africana, Desmodium barbatum,Manihot esculenta, Ocimum suave, Oldenlandia corymbosa and Sphaerogyne latifolia. 7 species increased both the force and frequency of contractions.

Conclusion

Several of the plant species induced strong and frequent contractions of the uterus, and can be used to induce an abortion.

Abbreviations

- ACh, acetylcholine

Keywords

- Abortion;
- Tanzania;
- Traditional medicine;
- Uterine contraction