

Validation of the ethnomedical use of Costa Rican plants for the treatment of menopause.
(Poster)

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Introduction

The outcomes of the women's health initiative demonstrated that hormone replacement therapy has many adverse effects in menopausal women, thus the development of new alternative treatments for menopause has become a high priority. In Central America, many women never use HRT, but instead use natural (alternative) therapies for the treatment of menopausal symptoms.

Objectives

To collect, identify, extract and bioassay medicinal plants from Costa Rica used to treat menopausal symptoms.

Methods

A list of plants commonly used to treat the symptoms of menopause in Costa Rica was compiled by searching the NAPRALERT database. The search yielded 12 plants for which there was literature indicating relevant ethnobotanical use and pharmacological data. These plants, along with five other plants that were indicated for the treatment of menopause by Costa Rican herbalists, were subsequently collected and extracted in Costa Rica. The extracts were then tested for activity in estrogen binding assays.

Results

Seven of the 17 plant extracts; *Smilax cordifolia*, *Pimentia dioica*, *Artemisia absinthium*, *Justicia pectoralis*, *Plantago major*, *Tanacetum parthenium*, and *Hibiscus sabdariffa*; have shown significant activity in preliminary estrogen binding assays. Of the seven active extracts, *S. cordifolia* and *P. dioica* were most active, showing 85% and 80% binding to ER- β , respectively, at 50 mcg/ml.

Conclusion

Of the 17 plants used in Costa Rica to treat the symptoms of menopause, extracts of seven plants were found to bind to the estrogen receptor. Since hormone replacement therapy reduces the symptoms of menopause by increasing estrogen concentrations, our data supports the use of these medicinal plants to treat menopausal symptoms.

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Selected References

None

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