Abstract: P20

Inhibition of nitric oxide (NO) synthesis antagonises the oestrogen-induced increase in coronary blood

U. Lang [a,*], R.S. Baker [b], G.A. Braems [a], K.E. Clark [b]

[a] *Frauenklinik, Justus-Liebig-Universität, Giessen, Germany*
[b] *Department of Obstetrics/Gynaecology University of Cincinnati, USA*

1. Objective

Oestrogen receptors have been found in coronary arterial endothelial and vascular smooth muscle cells. Therefore, the present study was designed to determine if oestradiol-17β and conjugated oestrogens can increase coronary blood flow and if so whether the changes are mediated by nitric oxide (NO).

2. Study design

Five oophorectomised non-pregnant sheep were chronically instrumented to measure blood pressure, heart rate, cardiac output, left circumflex coronary blood flow and central venous pressure. Animals received oestradiol-17β or conjugated oestrogens (1.0 μg/kg) and cardiovascular responses were followed for 135 min.

3. Results

Oestradiol-17β (1.0 μg/kg) increased the left circumflex (coronary) blood flow (28±3%), cardiac output (15±1%) and heart rate (13±3%). Coronary and systemic vascular resistance decreased by 23±5% and 12±2%, respiratory blood pressure did not change significantly. Conjugated oestrogens showed similar reactions. Administration of the nitric oxide synthetase inhibitor L-nitroarginine methylester (L-NAME) had no effect on basal coronary blood flow, but completely reversed oestradiol-17β-induced increases in coronary blood flow.

4. Conclusions

These results demonstrate that oestrogen increases coronary blood flow in the non-pregnant sheep and that L-NAME, an inhibitor of nitric oxide, is able to reverse the oestrogen-induced flow changes.

* Corresponding author.
E-mail address: uwe.lang@gyn.med.uni-giessen.de (U. Lang).

0959-8049/00/$ - see front matter © 2000 Published by Elsevier Science Ltd.
PII: S0959-8049(00)00266-5

Abstract: P21

Endometrial monitoring in postmenopausal patients with breast cancer who are treated with tamoxifen: report of 207 cases

H. Vernaeve [a,*], D. Timmerman [a], Ph. Moerman [b], I. Vergote [a]

[a] *Department of Obstetrics and Gynaecology, University Hospitals Leuven, KUL, Leuven, Belgium*
[b] *Department of Pathology, University Hospitals Leuven, KUL, Leuven, Belgium*

* Corresponding author.
E-mail address: hilver@hotmail.com (H. Vernaeve).

0959-8049/00/$ - see front matter
PII: S0959-8049(00)00267-7