Introduction

Bacterial infections are increasingly recognized as a cause of human stillbirth and severe or fatal perinatal infections. They may arise from bloodborne infections (hematogenous), ascending infections, vaginal infections, iatrogenic infections, or zoonosis.

Objective

To better understand the pathobiology of intrauterine infections before, during, and after pregnancy and to develop preventative strategies.

Methods

We performed timed vaginal ultrasound observations using Albuminex™ ultrasound contrast media shaken to form microbe-sized bubbles which were then placed in the vaginas of both a pregnant and a nonpregnant woman.

Results

Active transport of contrast media into the uterine cavity was demonstrated within two hours. Transport was associated with rhythmic antegrade and retrograde “to and fro” movement into the uterus, corresponding with similar studies using various particle and other media.

Conclusion

These studies suggest:

1) mechanisms by which cervical vaginal microbes such as group B strep, sexually transmitted infections, or HIV may be transported to upper genital tract sites of potential infection,

2) membrane stripping can massively transport infectious microorganisms into the lower uterine segment potentially causing intrauterine infection and even death in unborn babies, and

3) care providers should avoid membrane stripping and other iatrogenic procedures which can aid in causing intrauterine infection and fetal demise.

For further information and references, please visit www.gbs-intl.org or email jamiemcgregor@earthlink.net.