Microorganism spectrum of nonspecific vaginitis in women of infertile couples recognized by s-IgA uterine cervix secretion

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ABSTRACT

Objective: To explore the possible causes of infertility that occurs in Mojokerto, East Java, Indonesia.

Methods: The study was conducted by collecting biographical data in general and through clinical examination of all infertile couples. Other collected data included profiles of bacteria found in the vagina and an antibiotic sensitivity test of bacteria that can be isolated.

To determine the possibility of antibodies against sperm a western blot examination of bacterial proteins in fluid secretions obtained from the vagina was carried out first.

Results: The results show that microorganisms were identified from the female reproductive tract of infertile couples dominated by Staphylococcus aureus (S. aureus) (27%) and Escherichia coli (27%), and sensitivity tests of antibiotics vary greatly. One of the microorganisms particularly S. aureus that found in large number was done western blotting using s-IgA cervix uteri as an antibody recognized Omp’s with molecular weight, 52 kDa, and 49 kDa.

Conclusion: One of the bacteria species S. aureus that infects the vagina and causes nonspecific vaginitis can provoke an adaptive immune response by producing s-IgA. Difference MW of OMP S. aureus can stimulate immune response among women of infertile couples.