

Lactational mastitis: from etiopathogenesis to treatment

Prof Juan Miguel Rodríguez

Complutense University of Madrid, Spain

In the last years, breastfeeding has received a renewed interest in both developing and developed countries due to the short-, medium- and long-term health benefits that this feeding practice provides to the mother-child pair. On this basis, international and national health organisations recommend exclusive breastfeeding for the first 6 months of life and, then, a gradual weaning process in which the infant receives human milk for up to 1 year or more, if mutually desired by mother and infant. However, it is often difficult to cope with such recommendations due to several reasons. From the medical point of view, mastitis represents the first cause of undesired precocious weaning, with an incidence among lactating women as high as 35% when any clinical mastitis case is considered. Having in account the benefits provided by breastfeeding, mastitis should be considered a relevant Public Health issue.

Human milk contains a complex microbiota which may have relevant implications not only for short- and long-term infant health but also for mammary health. In fact, mammary dysbiosis, which may be triggered by a variety of host, microbial and medical factors, often leads to acute, subacute or subclinical mastitis, a condition that represents the first medical cause for undesired weaning. Resistance to antibiotics, ability for biofilm forming and iron sequestering, and mechanisms for evasion of the host immune response, are common features among the bacterial agents, mainly staphylococci, streptococci and corynebacteria, involved in such a condition. This explains why this condition can be elusive to antibiotic therapy, and why there is a need for standardisation of human milk cultures (including sample collection) and antibiograms in order to individualise and optimise the treatments. In addition, the development of new strategies for mastitis management based on probiotics is particularly appealing. In fact, selected lactobacilli strains isolated from milk have already shown a high efficacy for the prevention and treatment of such a condition.