WHO/FCH/CAH/00.13 ORIGINAL: ENGLISH DISTR: GENERAL

Mastitis

Causes and Management

DEPARTMENT OF CHILD AND ADOLESCENT HEALTH AND DEVELOPMENT



World Health Organization Geneva 2000

© World Health Organization 2000

This document is not a formal publication of the World Health Organization (WHO), and all rights are reserved by the Organization. The document may, however, be freely reviewed, abstracted, reproduced or translated, in part or in whole, but not for sale or for use in conjunction with commercial purposes.

The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The views expressed in documents by named authors are solely the responsibility of those authors.

Cover illustration adapted from a poster by permission of the Ministry of Health, Peru.

Contents

1.	Introduction	1
2.	Epidemiology	1
	2.1 Incidence	1
	2.2 Time of occurrence.	2
3.	Causes of mastitis	6
4.	Milk stasis	6
	4.1 Breast engorgement.	7
	4.2 Frequency of breastfeeds	7
	4.3 Attachment at the breast	7
	4.4 Preferred side and efficient suckling.	8
	4.5 Other mechanical factors	8
5.	Infection	9
	5.1 Infecting organisms.	9
	5.2 Bacterial colonisation of the infant and breast	9
	5.3 Epidemic puerperal mastitis.	10
	5.4 Routes of infection.	10
6.	Predisposing factors	11
7	Pathology and clinical features	13
. •	7.1 Engorgement.	13
	7.2 Blocked duct	13
	7.3 Non-infectious mastitis.	14
	7.4 Immune factors in milk	15
	7.5 Sub-clinical mastitis.	15
	7.6 Infectious mastitis	16
	7.7 Breast abscess	17
Q	Prevention	17
0.	8.1 Improved understanding of breastfeeding management	17
	8.2 Routine measures as part of maternity care	18
	8.3 Effective management of breast fullness and engorgement	18
	8.4 Prompt attention to any signs of milk stasis	19
	8.5 Prompt attention to other difficulties with breastfeeding	19
	8.6 Control of infection.	20
0	Transferrent	30
9.	Treatment	20
	9.1 Blocked duct	21
	9.2 Mastitis	21
	9.3 Breast abscess.	24

10. Safety of continuing to breastfeed	25
11. Long term outcome	26
12. Management of mastitis in women who are HIV-positive	27
13. Conclusion	28
Annex 1. Breastfeeding techniques to prevent and treat mastitis	29
Annex 2. Expression of breastmilk	32
Annex 3. Suppression of lactation.	34
References.	35

Acknowledgements

The authors of this review were Ms Sally Inch and Dr Severin von Xylander, with editorial assistance from Dr Felicity Savage.

Many thanks are due to the following lactation experts for reviewing the document in draft and for providing helpful constructive criticism:

Dr Lisa Amir (Australia), Ms Genevieve Becker (Eire), Ms Chloe Fisher (UK), Dr Arun Gupta (India), Dr Rukhsana Haider (Bangladesh), Ms Joy Heads (Australia), Dr Evelyn Jain (Canada), Dr Miriam Labbock (USA), Ms Sandra Lang (UK), Dr Verity Livingstone (Canada), Dr Gro Nylander (Norway), Dr Marina Rea (Brazil), Ms Janice Riordan (USA), Dr Anders Thomsen (Denmark), Ms Marsha Walker (USA) and Dr Michael Woolridge (UK).

Ms Helen Armstrong (UNICEF) also reviewed the draft document and provided many helpful suggestions.

Thanks also to members of WHO's Technical Working Group on Breastfeeding for helpfully reviewing the manuscript: Dr Jose Martines, Ms Randa Saadeh, Dr Constanza Vallenas and Dr Jelka Zupan.

Mastitis:

Causes and Management

1. Introduction

Mastitis is an inflammatory condition of the breast, which may or may not be accompanied by infection. It is usually associated with lactation, so it is also called *lactational mastitis* (67) or *puerperal mastitis* (1). It can occasionally be fatal if inadequately treated. Breast abscess, a localised collection of pus within the breast, is a severe complication of mastitis. These conditions form a considerable burden of disease and involve substantial costs (43; 112). Recent research suggests that mastitis may increase the risk of transmission of HIV through breastfeeding (76; 150).

Awareness is growing that inefficient removal of milk resulting from poor breastfeeding technique is an important underlying cause, but mastitis remains synonymous with breast infection in the minds of many health professionals (11; 15; 93; 94). They are often unable to help a woman with the condition to continue to breastfeed, and they may advise her unnecessarily to stop (43).

This review aims to bring together available information on lactational mastitis and related conditions and their causes, to guide practical management, including the maintenance of breastfeeding.

2. Epidemiology

2.1 Incidence

Mastitis and breast abscess occur in all populations, whether or not breastfeeding is the norm. The reported incidence varies from a few to 33% of lactating women, but is usually under 10% (Table 1). Most studies have major methodological limitations, and there are no large prospective cohort studies. The higher rates are from selected populations.

The incidence of breast abscess also varies widely, and most estimates are from retrospective studies of patients with mastitis (Table 2). However, according to some reports, especially from developing countries, an abscess may also occur without apparent preceding mastitis.

2.2 Time of occurrence

Mastitis is commonest in the second and third week postpartum (29; 120; 122), with most reports indicating that 74% to 95% of cases occur in the first 12 weeks (49; 122; 140; 167; 170). However, it may occur at any stage of lactation, including in the second year (7; 140). Breast abscess also is commonest in the first 6 weeks post partum, but may occur later (18; 32; 43; 49; 71; 74; 109; 119; 157).

预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5 30489

