

Inflammatory breast cancer: An overview

D.J.P. van Uden^{a,*}, H.W.M. van Laarhoven^b, A.H. Westenberg^c, J.H.W. de Wilt^d,
C.F.J.M. Blanken-Peeters^e

^a Department of Surgery, Canisius Wilhelmina Hospital, Postbus 9015, 6500 GS Nijmegen, The Netherlands

^b Medical Oncology, Academic Medical Center, University of Amsterdam, Postbus 22660, 1100 DD Amsterdam, The Netherlands

^c Institute for Radiation Oncology, Postbus 60160, 6800 JD Arnhem, The Netherlands

^d Department of Surgery, Radboud University Medical Center, Geert Grooteplein-Zuid 10, 6525 GA Nijmegen, The Netherlands

^e Department of Surgery, Rijnstate Hospital, Wagnerlaan 55, 6815 AD Arnhem, The Netherlands

Accepted 30 September 2014

Contents

1. Introduction	117
2. Methods	117
3. Clinical and pathological characteristics of inflammatory breast cancer	118
4. Epidemiologic features	118
5. Diagnosis and staging of inflammatory breast cancer	118
6. Systemic neoadjuvant chemotherapy	119
7. Surgery	119
8. Radiotherapy	120
9. Molecular characteristics	120
9.1. Hormone receptors	120
9.2. Epidermal growth factor receptors	120
9.3. Tumor suppressor genes and oncogenes	121
9.4. (Lymph) angiogenic factors	122
10. Conclusion	123
Conflict of interest	124
Reviewers	124
References	124
Biographies	126

Abstract

Inflammatory breast cancer (IBC) is the most aggressive entity of breast cancer. Management involves coordination of multidisciplinary management and usually includes neoadjuvant chemotherapy, ablative surgery if a tumor-free resection margin is expected and locoregional radiotherapy. This multimodal therapeutic approach has significantly improved patient survival. However, the median overall survival among women with IBC is still poor. By elucidating the biologic characteristics of IBC, new treatment options may become available. We performed a comprehensive review of the English-language literature on IBC through computerized literature searches. The objective of the current review is to present an overview of the literature related to the biology, imaging and multidisciplinary treatment of inflammatory breast cancer. © 2014 Elsevier Ireland Ltd. All rights reserved.

Keywords: Inflammatory breast cancer; Molecular characteristics; Treatment; Surgery

* Corresponding author at: Department of Surgery, Canisius Wilhelmina Ziekenhuis Nijmegen, Weg door Jonkerbos 100, 6532 SZ Nijmegen, The Netherlands. Tel.: +31 24 365 76 57.

E-mail address: djpvanden@gmail.com (D.J.P. van Uden).

<http://dx.doi.org/10.1016/j.critrevonc.2014.09.003>

1040-8428/© 2014 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Inflammatory breast cancer (IBC) is a rare subtype of locally advanced breast cancer according to the tumor-node-metastasis (TNM) breast cancer staging system. IBC is classified as T4d and clinically characterized by diffuse induration of the skin with an erysipeloid edge, usually with no underlying mass (Fig. 1) [1]. The objective of the current review is to present an overview of the literature related to the biology, imaging and multidisciplinary treatment of inflammatory breast cancer.

2. Methods

The PubMed database was searched using the following terms (Fig. 2): “inflammatory breast cancer” successively complemented with “epidemiology” and “risk factors”, “MRI” and “PET/CT”, “chemotherapy”, “surgery”, “radiotherapy”, “hormone receptors”, “epidermal growth factor receptors”, “tumor suppressor genes”, “(lymph) angiogenesis” with the limits English, Publication Date from 1980/01/01, Humans, abstract available. We augmented this computerized literature search by manually reviewing the



Fig. 1. 46-year old women presenting with swelling and erythema of the left breast, caused by inflammatory breast cancer.

reference lists of included studies to identify additional relevant articles. We discarded duplicate publications. Filtered on title and abstract, we analyzed the manuscripts and articles were eligible when they reported a series of patients presenting with inflammatory breast cancer or when an overview concerning a specific subject with regard to inflammatory

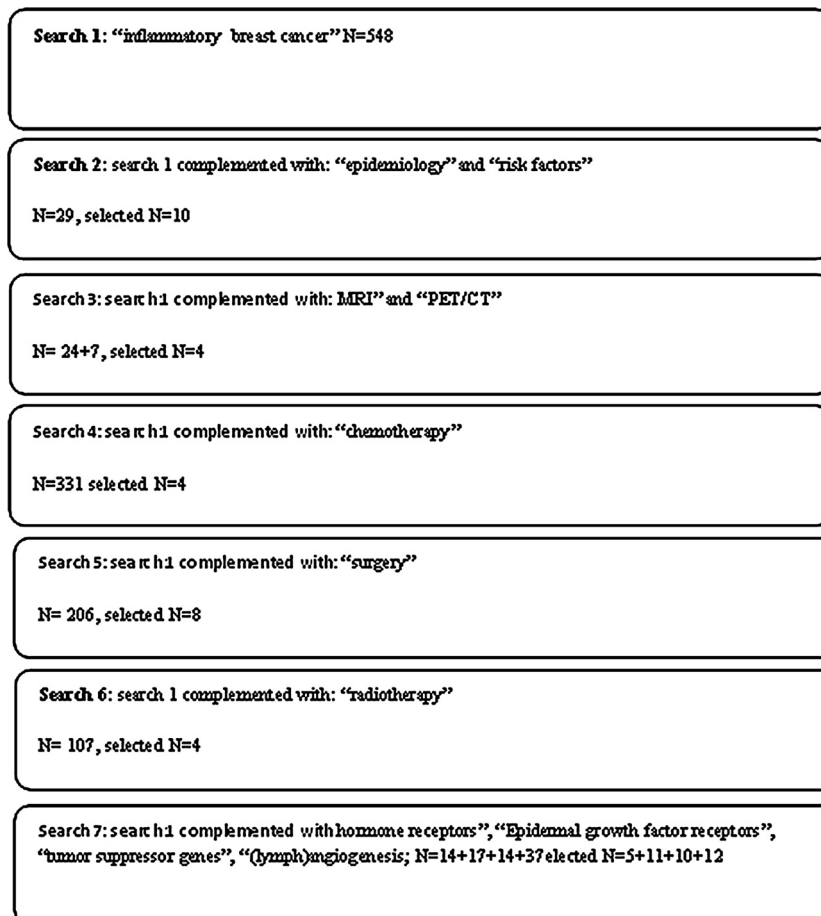


Fig. 2. Flowchart of literature search.

Download English Version:

<https://daneshyari.com/en/article/3328733>

Download Persian Version:

<https://daneshyari.com/article/3328733>

[Daneshyari.com](https://daneshyari.com)