

Workshop
BIA-ALCL Breast Implant Associated
Anaplastic Large Cells Lymphoma

11 aprile 2019

ASPETTI DERMATOLOGICI

PIETRO QUAGLINO

CLINICA DERMATOLOGICA- DIPARTIMENTO SCIENZE MEDICHE
UNIVERSITA' DI TORINO – AOU CITTA' DELLA SALUTE E DELLA SCIENZA
TORINO

METODOLOGIA DI DIAGNOSI

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graph TD; A[METODOLOGIA DI DIAGNOSI] --> B[MORFOLOGIA DELLE LESIONI]; A --> C[TOPOGRAFIA DELLE LESIONI]; A --> D[SINTOMI, ANAMNESI];
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MORFOLOGIA
DELLE LESIONI

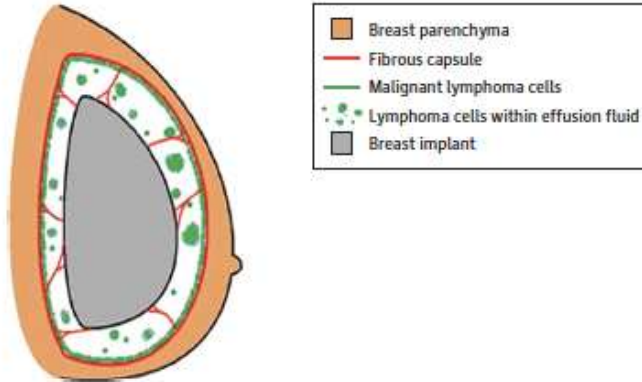
-Lesioni
elementari
-clinica
(dermoscopio)

TOPOGRAFIA
DELLE LESIONI

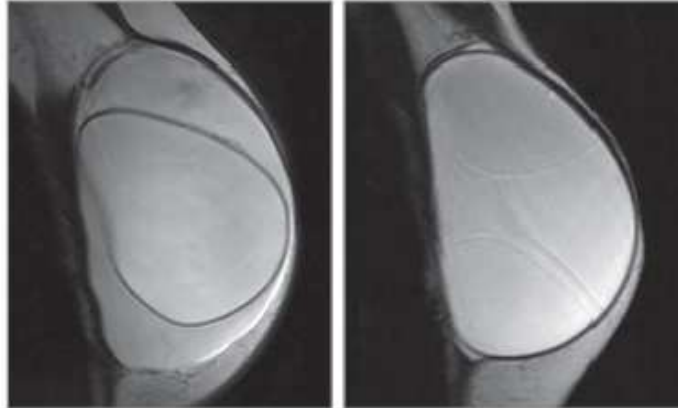
SINTOMI ,
ANAMNESI
(conferma
Definizione dei
bisogni del
paziente es.
prurito)

Figure 1. Assessment of Patients With Late Peri-implant Seromas

A Schematic representation



B Affected breast (left) and unaffected breast (right)



C Affected breast axillary loculated (left), medial (middle), and inferior (right) fluid collection



A, Schematic representation by Thompson et al³⁵ of effusion-associated anaplastic large cell lymphoma after breast augmentation (reprinted with permission from *Haematologica*). The septated effusion is contained between the implant and the fibrous capsule that surrounds the implant. The malignant cells are contained within the effusion fluid and adherent to the fibrous capsule within a serofibrinous exudate. There is no invasion beyond the fibrous capsule

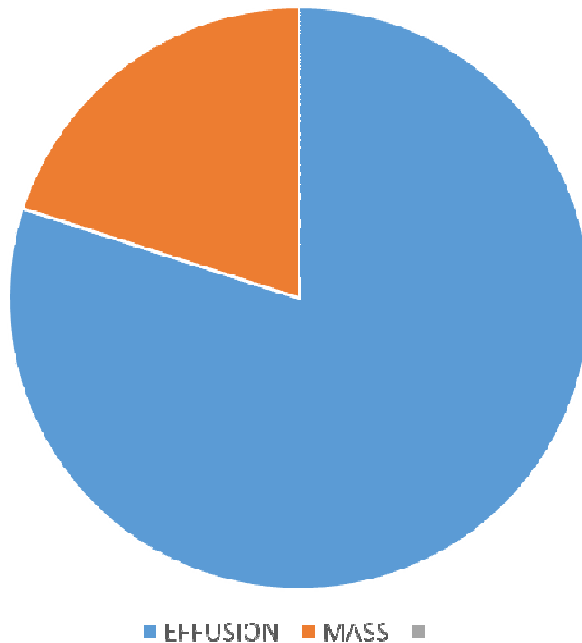
into the breast parenchyma. B, T2-weighted breast magnetic resonance images of anaplastic large cell lymphoma in the affected right breast (left) and unaffected left breast (right) of a patient. C, Ultrasound images of the patient's right breast axillary loculated fluid collection (left), medial fluid collection (middle), and inferior fluid collection (right).

..MALIGNANT CELLS
ARE CONTAINED
WITHIN THE
EFFUSION FLUID
AND ADHERENT TO
THE FIBROUS
CAPSULE

Thompson et al.
Haematologica 2010

PRESENTAZIONE CLINICA

Women who develop BIA-ALCL typically present with either large volume peri-implant effusions (80%) or solid capsule-related masses (20%).



Olack B, Gupta R, Brooks GS. Anaplastic large cell lymphoma arising in a saline breast implant capsule after tissue expander breast reconstruction. *Ann Plast Surg* 2007;59(1):56–7

Breast Implant and Anaplastic Large Cell Lymphoma Meta-Analysis

Guillermo Ramos-Gallardo, Jesús Cuenca-Pardo, Eugenio Rodríguez-Olivares, Rufino Iribarren-Moreno, Livia Contreras-Bulnes, Alfonso Vallarta-Rodríguez, Marco Kalixto-Sánchez, Claudia Hernández, Ricardo Ceja-Martínez & Cesar Torres-Rivero

<https://doi.org/10.1080/08941939.2016.1215576>

PUBLISHED ONLINE:

18 August 2016

Figure 8 of 10

Figure 8. Clinical findings at the moment to lymphoma diagnoses.

Report	SEROMA	LYMPH NODES	MASS	OTHER	NOT REGISTERED
Story SK 5	53%		35%	12%	
Kim B 4,8	79%		24%		59%
Ramos- .Cuenca	70.1%	13.8%	7.5%	11.4%	5%
AVERAGE	67.33%	13.8%	22.1%	11.7%	32%

JAMA Surgery | Review

Breast Implant-Associated Anaplastic Large Cell Lymphoma A Systematic Review

Ashley N. Leberfinger, MD; Brittany J. Behar, MD; Nicole C. Williams, MD, MBA; Kevin L. Rakszawski, MD;
John D. Potochny, MD; Donald R. Mackay, DDS, MD; Dino J. Ravnic, DO, MPH

IMPORTANCE Breast implant-associated anaplastic large cell lymphoma (BIA-ALCL), a rare peripheral T-cell lymphoma, is increasing in incidence. However, many practitioners who treat patients with breast cancer are not aware of this disease.

OBJECTIVES To assess how BIA-ALCL develops, its risk factors, diagnosis, and subsequent treatment and to disseminate information about this entity to the medical field.

EVIDENCE REVIEW A literature review was performed in an academic medical setting. All review articles, case reports, original research articles, and any other articles relevant to BIA-ALCL were included. Data on BIA-ALCL, such as pathophysiology, patient demographics, presentation, diagnosis, treatment, and outcomes, were extracted. Particular focus was paid to age, time to onset, implant type, initial symptoms, treatment, and survival. The search was conducted in January 2017 for studies published in any year.

 [Supplemental content](#)

 [CME Quiz at \[jamanetwork.com/learning\]\(http://jamanetwork.com/learning\) and CME Questions page 1188](#)

Table 1. Clinicopathological Features of 95 Patients With Breast Implant–Associated Anaplastic Large Cell Lymphoma Included in the Systematic Review

Variable	Value
Age at onset, mean, y (n = 94)	51
Time to onset, y (n = 85)	10
Type of surgery, No./total No. (%)	
Reconstruction	43/80 (54)
Cosmetic	37/80 (46)
Type of implant, No./total No. (%)	
Saline	31/80 (39)
Silicone	49/80 (61)
Initial presentation, No./total No. (%)	
Seroma	55/83 (66)
Mass	7/83 (8)
Both seroma and mass	6/83 (7)
Other	15/83 (18)

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ORIGINAL ARTICLE

WILEY *The Breast Journal*

Breast implant-associated anaplastic large cell lymphoma: Clinical and imaging findings at a large US cancer center

Brittany Z. Dashevsky MD, DPhil¹  | Katherine M. Gallagher MD¹ |
Anne Grabenstetter MD² | Peter G. Cordeiro MD³ | Ahmet Dogan MD, PhD² |
Elizabeth A. Morris MD¹ | Steven M. Horwitz MD⁴ | Elizabeth J. Sutton MD¹

¹Department of Radiology, Memorial Sloan Kettering Cancer Center, New York City, New York

²Department of Pathology, Memorial Sloan

Abstract

Purpose: Evaluate the clinical presentation and imaging findings of breast implant-associated anaplastic large cell lymphoma (BIA-ALCL) at a large US cancer center

TABLE 1 Patient clinical and imaging characteristics

Case	Age (years)	Reason for implant	Implant	Textured	Implant side	Location	Years from first placement	ALCL Side	Physical Exam	Imaging findings and Modality
1	54	Left DCIS	Silicone	U	Bilateral	U	14	Right	Swelling	U
2	50	Left IDC	U	Y	Bilateral	U	6	Left	Swelling	U
3	51	Left IDC	Saline	Y	Bilateral	Subpectoral	6	Left	Asymptomatic	US/MRI: Peri-implant seroma; PET avid nodular thickening of implant capsule
4	55	Left IDC	U	U	Left	U	12	Left	Erythema and mass	US: Peri-implant seroma +mass; PET: mass and axillary lymph node FDG-avid
5	55	Left DCIS	Saline	Y	Bilateral	Subpectoral	11	Right	Swelling	US: Peri-implant seroma; PET avid
6	50	Right ILC	Saline	Y	Bilateral	Subpectoral	9	Left	Swelling	PET/CT: Peri-implant seroma (BIA ALCL), liver, peritoneal and bone metastases
7	35	Cosmetic	Silicone	U	Bilateral	Subpectoral	8	Right	Swelling	MRI: Peri-implant seroma, axillary adenopathy
8	44	Cosmetic	Silicone	U	Bilateral	Subglandular	14	Left	Contracture	MRI: Implant rupture. Fluid, breast thickening
9	51	Right ILC	Saline	Y	Bilateral	Subpectoral	6	Left	Swelling	US: Septated peri-implant collection
10	77	Bilateral DCIS	Silicone	Y	Bilateral	Subpectoral	11	Right	Mass	US: Peri-implant seroma; MRI: chest wall mass, FDG-avid on PET
11	72	Left IDC, Right DCIS	Silicone	Y	Bilateral	Subpectoral	13	Right	Enlarging breast	US: Peri-implant seroma



Variable presentation of anaplastic large-cell lymphoma in patients with breast implants

Michelle B. Locke* and Julian Loftst

*Department of Surgery, South Auckland Clinical Campus, Middlemore Hospital, University of Auckland, Auckland, New Zealand and

†Private Practice, Auckland, New Zealand

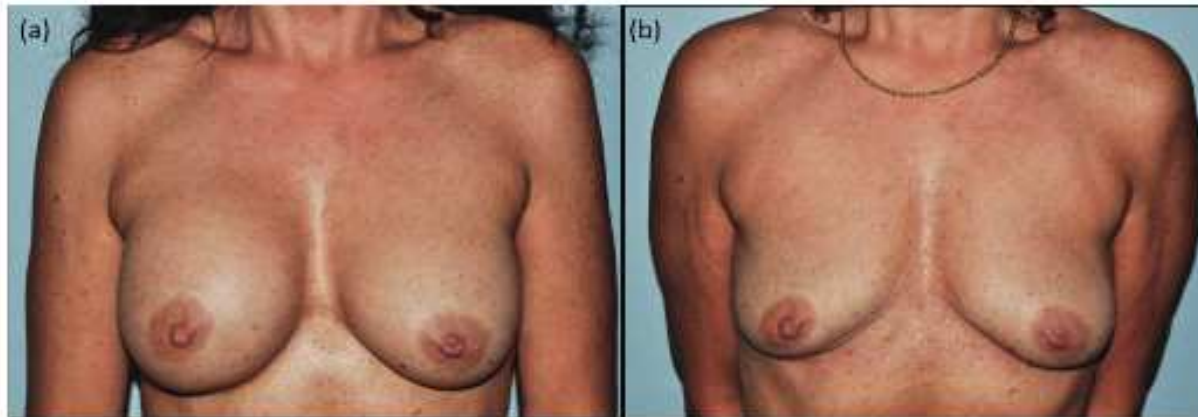


Fig. 1. Case 2: (a) preoperative appearance showing right breast swelling; (b) post-operative appearance following bilateral explantation and capsulectomies.

Breast implant associated anaplastic large cell lymphoma:
The UK experience. Recommendations on its management
and implications for informed consent



L. Johnson ^{a,*}, J.M. O'Donoghue ^b, N. McLean ^c, P. Turton ^d,
A.A. Khan ^e, S.D. Turner ^f, A. Lennard ^b, N. Collis ^b,
M. Butterworth ^g, G. Gui ^h, J. Bristol ⁱ, J. Hurren ^j, S. Smith ^k,
K. Grover ^l, G. Spyrou ^m, K. Krupa ^g, I.A. Azmy ⁿ, I.E. Young ^o,
J.J. Staiano ^p, H. Khalil ^q, F.A. MacNeill ^h



Figure 1. Stage I BIA-ALCL. Previous mastectomy and immediate breast reconstruction. Patient presented with a large volume effusion of the left breast and was diagnosed with stage I (BIA-ALCL).

Anaplastic Large-Cell Lymphoma Associated with Breast Implants: A Case Report of a Transgender Female

Matej Patzelt^{1,2} · Lucie Zarubova^{1,3} · Pavel Klener^{4,5} · Josef Barta⁶ · Kamila Benkova⁷ · Adrianna Brandejsova¹ · Marek Trnecny⁴ · Robert Gürlich^{2,3} · Andrej Sukop^{1,2}



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Fig. 1 Preoperative photo of the chest, redness of the skin on the left breast





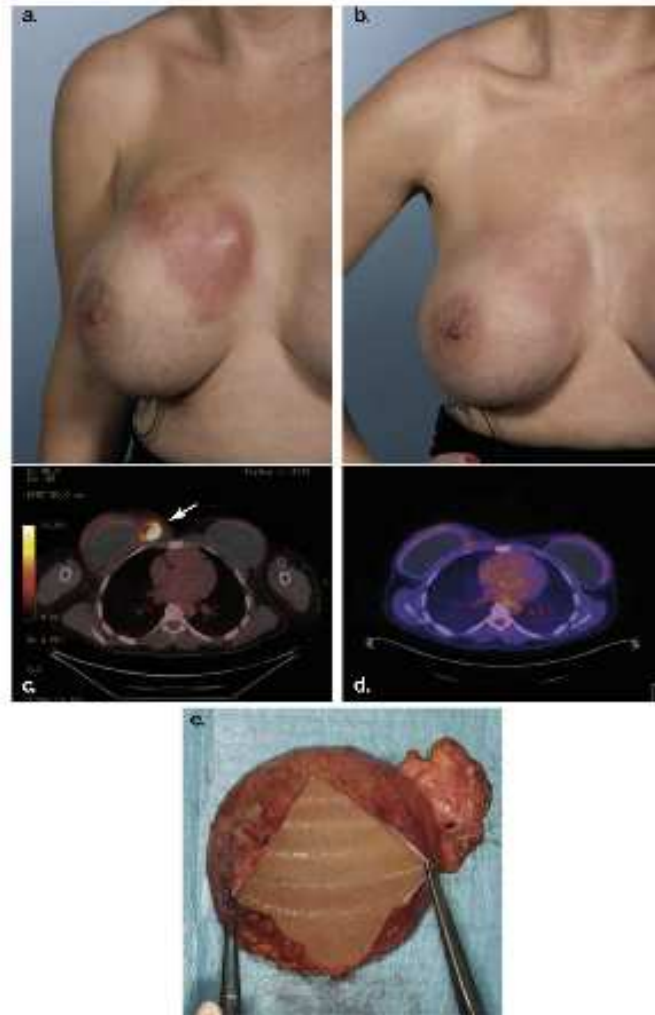


Figure 2. Stage II+ BIA-ALCL. a) Presentation of chest wall mass confirmed as BIA-ALCL that progressed on first line CHOP chemotherapy prior to commencing Brentuximab, b) PETCT scan prior to the commencement of Brentuximab Vedotin. Tumour exhibiting high FDG avidity (white arrow), c) Chest wall mass following one cycle of Brentuximab, d) PET-CT post-Brentuximab showing complete PET response of anterior chest wall mass after 6 cycles e) Surgical specimen after neoadjuvant Brentux-



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J.J. Staiano ^p, H. Khalil ^q, F.A. MacNeill ^h

DIAGNOSI DIFFERENZIALE



Primary Cutaneous CD30+ Anaplastic Large Cell Lymphoma







Ca mammario ?
Morbo di Paget?
Pioderma gangrenoso?

Patomimia



DIAGNOSI DIFFERENZIALE

ERITEMA

Dermatite da contatto

Intertrigine

PLACCA – MASSA

Erisipela

Metastasi cutanea

Linfoma cutaneo