

A review of radiological characteristics and patterns of fat necrosis after different autologous breast surgery techniques

ELECTRONIC SUPPLEMENTARY MATERIAL

Appendix A. Literature search

PubMed search:

Concept	Search	Results
Imaging	("Magnetic Resonance Imaging"[Mesh] OR "Mammography"[Mesh] OR "Ultrasonography, Mammary"[Mesh] OR "Ultrasonography"[Mesh] OR "Diagnostic Imaging"[Mesh:NoExp] OR "diagnostic imaging" [Subheading] OR "magnetic resonance imag*" [tiab] OR MRI [tiab] OR MRIs [tiab] OR MR [tiab] OR mammograph* [tiab] OR mastograph* [tiab] OR mammogram* [tiab] OR ultraso* [tiab] OR "ultra sound" [tiab] OR echoscop* [tiab] OR sonograph* [tiab] OR echograph* [tiab] OR echomammograph* [tiab] OR imaging [tiab] OR image [tiab] OR images [tiab])	3,454,548
	AND	
Fat necrosis	("Fat Necrosis"[Mesh] OR "fat necros*" [tiab] OR "fatty necros*" [tiab] OR liponecros* [tiab] OR steatonecros* [tiab] OR cytosteatonecros* [tiab] OR adiponecros* [tiab] OR "adipose tissue necros*" [tiab] OR "oil cyst*" [tiab] OR "liponecrotic cyst*" [tiab] OR microcalcification* [tiab] OR calcification* [tiab])	78,921
	AND	
Flap	("Surgical Flaps"[Mesh] OR flap [tiab] OR flaps [tiab]	
	OR	

AFT	"Adipose Tissue/transplantation"[Mesh] OR "Mammaplasty"[Mesh] OR "Plastic Surgery Procedures"[Mesh] OR "fat grafting"[tiab] OR "fat transfer*"[tiab] OR "fat transplantation*"[tiab] OR "fat tissue transplantation*"[tiab] OR "fat injection*"[tiab] OR lipofilling[tiab] OR lipostructuring[tiab] OR lipotransfer*[tiab] OR lipomodelling[tiab] OR AFT[tiab] OR AFG[tiab] OR reconstruct*[tiab] OR "oncoplastic surger*"[tiab] OR mammoplast*[tiab] OR mastoplast*[tiab] OR mammaplast*[tiab])	667,341
	AND	
Breast	("Breast"[Mesh] OR breast[tiab] OR breasts[tiab] OR mamma[tiab] OR mammae[tiab] OR mammary[tiab])	637,692

("Magnetic Resonance Imaging"[MeSH Terms] OR "Mammography"[MeSH Terms]
OR "ultrasonography, mammary"[MeSH Terms] OR "Ultrasonography"[MeSH Terms]
OR "Diagnostic Imaging"[MeSH Terms:noexp] OR "Diagnostic Imaging"[MeSH
Subheading] OR "magnetic resonance imag*"[Title/Abstract] OR "MRI"[Title/Abstract]
OR "MRIs"[Title/Abstract] OR "MR"[Title/Abstract] OR "mammograph*"[Title/Abstract]
OR "mastograph*"[Title/Abstract] OR "mammogram*"[Title/Abstract] OR
"ultraso*"[Title/Abstract] OR "ultra sound"[Title/Abstract] OR
"echoscop*"[Title/Abstract] OR "sonograph*"[Title/Abstract] OR
"echograph*"[Title/Abstract] OR "echomammograph*"[Title/Abstract] OR
"imaging"[Title/Abstract] OR "image"[Title/Abstract] OR "images"[Title/Abstract]) AND
("Fat Necrosis"[MeSH Terms] OR "fat necros*"[Title/Abstract] OR "fatty
necros*"[Title/Abstract] OR "liponecros*"[Title/Abstract] OR
"steatonecros*"[Title/Abstract] OR "cytosteatonecros*"[Title/Abstract] OR
"adiponecros*"[Title/Abstract] OR "adipose tissue necros*"[Title/Abstract] OR "oil
cyst*"[Title/Abstract] OR "liponecrotic cyst*"[Title/Abstract] OR
"microcalcification*"[Title/Abstract] OR "calcification*"[Title/Abstract]) AND ("Surgical
Flaps"[MeSH Terms] OR "flap"[Title/Abstract] OR "flaps"[Title/Abstract] OR "adipose
tissue/transplantation"[MeSH Terms] OR "Mammaplasty"[MeSH Terms] OR "Plastic
Surgery Procedures"[MeSH Terms] OR "fat grafting"[Title/Abstract] OR "fat

transfer*"[Title/Abstract] OR "fat transplantation*"[Title/Abstract] OR "fat tissue transplantation*"[Title/Abstract] OR "fat injection*"[Title/Abstract] OR "lipofilling"[Title/Abstract] OR "liposculpting"[Title/Abstract] OR "lipotransfer*"[Title/Abstract] OR "lipomodelling"[Title/Abstract] OR "AFT"[Title/Abstract] OR "AFG"[Title/Abstract] OR "reconstruct*"[Title/Abstract] OR "oncoplastic surger*"[Title/Abstract] OR "mammoplast*"[Title/Abstract] OR "mastoplast*"[Title/Abstract] OR "mammaplast*"[Title/Abstract]) AND ("Breast"[MeSH Terms] OR "Breast"[Title/Abstract] OR "breasts"[Title/Abstract] OR "mamma"[Title/Abstract] OR "mammae"[Title/Abstract] OR "mammary"[Title/Abstract])

21-5-2025: 518 results

Embase search:

Concept	Search	Results
Imaging	exp nuclear magnetic resonance imaging/ OR exp mammography/ OR exp echography/ OR diagnostic imaging/ OR ("magnetic resonance imag*" OR MRI OR MRIs OR MR OR mammograph* OR mastograph* OR mammogram* OR ultraso* OR "ultra sound" OR echoscop* OR sonograph* OR echograph* OR echomammograph* OR imaging OR image OR images).ti,ab,kf.	4,328,451
	AND	
Fat necrosis	exp fat necrosis/ OR ("fat necros*" OR "fatty necros*" OR liponecros* OR steatonecros* OR cytoateonecros* OR adiponecros* OR "adipose tissue necros*" OR "oil cyst*" OR "liponecrotic cyst*" OR microcalcification* OR calcification*).ti,ab,kf.	112,350
	AND	
Flap	exp surgical flaps/ OR exp tissue flap/ OR tissue graft/ or free tissue graft/ OR (flap OR flaps).ti,ab,kf.	
	OR	
AFT	exp breast reconstruction/ OR ("fat grafting" OR "fat transfer*" OR "fat transplantation*" OR "fat tissue transplantation*" OR "fat injection*" OR lipofilling OR lipostructuring OR lipotransfer* OR lipomodelling OR AFT OR AFG OR reconstruct* OR "oncoplastic surger*" OR mammoplast* OR mastoplast* OR mammoplast*).ti,ab,kf.	596,920
	AND	
Breast	breast/ OR (Breast OR Breasts OR mamma OR mammae OR mammary).ti,ab,kf.	877,522

Embase <1974 to 2025 Week 20>

1 exp nuclear magnetic resonance imaging/ or exp mammography/ or exp echography/ or diagnostic imaging/ or ("magnetic resonance imag*" or MRI or MRIs or MR or mammograph* or mastograph* or mammogram* or ultraso* or "ultra sound" or echoscop* or sonograph* or echograph* or echomammograph* or imaging or image or images).ti,ab,kf. 4328451

2 exp fat necrosis/ or ("fat necros*" or "fatty necros*" or liponecros* or steatonecros* or cytosteatonecros* or adiponecros* or "adipose tissue necros*" or "oil cyst*" or "liponecrotic cyst*" or microcalcification* or calcification*).ti,ab,kf. 112350

3 exp surgical flaps/ or exp tissue flap/ or tissue graft/ or free tissue graft/ or (flap or flaps).ti,ab,kf. 141962

4 exp breast reconstruction/ or ("fat grafting" or "fat transfer*" or "fat transplantation*" or "fat tissue transplantation*" or "fat injection*" or lipofilling or lipostructuring or lipotransfer* or lipomodelling or AFT or AFG or reconstruct* or "oncoplastic surger*" or mammoplast* or mastoplast* or mammaplast*).ti,ab,kf. 518698

5 3 or 4 596920

6 breast/ or (Breast or Breasts or mamma or mammae or mammary).ti,ab,kf. 877522

7 1 and 2 and 5 and 6 865

21-5-2025: 865 results

Scopus search:

Concept	Search	Results
Imaging	TITLE-ABS-KEY ("magnetic resonance imag*" OR MRI OR MRIs OR MR OR mammograph* OR mastograph* OR mammogram* OR ultraso* OR "ultra sound" OR echoscop* OR sonograph* OR echograph* OR echomammograph* OR imaging OR image OR images)	6,935,215
	AND	
Fat necrosis	TITLE-ABS-KEY ("fat necros*" OR "fatty necros*" OR liponecros* OR steatonecros* OR cytosteatonecros* OR adiponecros* OR "adipose tissue necros*" OR "oil cyst*" OR "liponecrotic cyst*" OR microcalcification* OR calcification*)	148,609
	AND	
Flap	TITLE-ABS-KEY (flap OR flaps)	1,386,181
	OR	
AFT	TITLE-ABS-KEY ("fat grafting" OR "fat transfer*" OR "fat transplantation*" OR "fat tissue transplantation*" OR "fat injection*" OR lipofilling OR lipostructuring OR lipotransfer* OR lipomodelling OR AFT OR AFG OR reconstruct* OR "oncoplastic surger*" OR mammoplast* OR mastoplast* OR mammaplast*)	
	AND	
Breast	TITLE-ABS-KEY (Breast OR Breasts OR mamma OR mammae OR mammary)	1,034,852

Advanced query

(TITLE-ABS-KEY (("magnetic resonance imag*" OR mri OR mris OR mr OR mammograph* OR mastograph* OR mammogram* OR ultraso* OR "ultra sound" OR echoscop* OR sonograph* OR echograph* OR echomammograph* OR imaging OR image OR images)) AND TITLE-ABS-KEY (("fat necros*" OR "fatty necros*" OR liponecros* OR steatonecros* OR cytosteatonecros* OR adiponecros* OR "adipose tissue necros*" OR "oil cyst*" OR "liponecrotic cyst*" OR microcalcification* OR calcification*)) AND TITLE-ABS-KEY ((flap OR flaps OR "fat grafting" OR "fat transfer*" OR "fat transplantation*" OR "fat tissue transplantation*" OR "fat injection"

OR lipofilling OR lipostructuring OR lipotransfer* OR lipomodelling OR aft OR afg OR
reconstruct* OR "oncoplastic surger*" OR mammoplast* OR mastoplast* OR
mammaplast*)) AND TITLE-ABS-KEY ((breast OR breasts OR mamma OR
mmae OR mammary)))

21-5-2025: 1,223 results