

Differential Diagnosis of Breast Pain

	Raffery and Lim	Labas and Kowolak	Collins (dDx)	Collected cases
Breast cancer	x		x	1
Fibrocystic breast	x	x		
Ductal ectasia	x	x		
Fat necrosis	x	x		
Breast abscess	x	x	x	
Pregnancy	x		x	
Lactation	x			
Mastitis	x	x	x	1
Tietze's disease	x			
Mondor's disease	x			
Rib metastases	x			
Herpes zoster	x		x	
Infected sebaceous cyst		x		
Gynecomastia				3
Implant rupture				1

Breast Pain		
Cause	Clinical Features	Imaging Findings
BREAST PARENCHYMA		
Breast cancer	Breast nodule.	Mass, asymmetry, malignant calcifications, architectural distortion, dilated duct(s) upstream from obstructing lesion.
Fibrocystic breast	Breast nodule.	Mass, asymmetry.
Ductal ectasia	Breast nodule, erythema, itching, lymphadenopathy, nipple discharge, nipple retraction, Peau d'orange	Dilated ducts; rod shaped calcifications.
Fat necrosis	History of trauma or breast reduction. Breast nodule, erythema, nipple retraction.	Mass, peripherally calcified, centrally fat-density lesions.
Breast abscess	Breast nodule, erythema, fever, Peau d'orange. Breast discharge (pus).	Mass. US shows a multiloculated hypoechoic avascular lesion with acoustic enhancement.
Mastitis	Breast nodule, erythema, fever, nipple retraction,.	Mass.
Infected sebaceous cyst	Breast nodule, erythema.	Mass.
Gynecomastia	Male; many different drugs may cause.	Usually symmetric, flame shaped density in the retroareolar area.
BREAST SKIN		
Breast cancer	Breast nodule.	Skin thickening, skin retraction.
Mastitis	Breast nodule, erythema, fever, nipple retraction,.	Skin thickening.
Infected sebaceous cyst	Breast nodule, erythema.	Subcutaneous skin lesion.
AXILLARY TISSUE		
Breast cancer	Breast nodule.	Mass (primary axillary tail tumor), lymphadenopathy (metastases).
Breast abscess	Breast nodule, erythema, fever, Peau d'orange. Breast discharge (pus).	Lymphadenopathy (reactive or infectious)
Mastitis	Breast nodule, erythema, fever, nipple retraction,.	Lymphadenopathy (reactive or infectious)
Infected sebaceous cyst	Breast nodule, erythema.	Lymphadenopathy (reactive or infectious)

References

Collins RD. *Differential Diagnosis in Primary Care*. Wolters Kluwer, Philadelphia, 2012.

Labus D, Kowalak J. *Handbook of Signs & Symptoms*, 4th ed. Wolters Kluwer, Philadelphia, 2010.

Raftery AT, Lim E. *Churchill's Pocketbook of Differential Diagnosis*. Churchill Livingstone, Philadelphia, 2001.