**Breast Lump - Summary**

* RF’s:
	+ Female
	+ Increases with age
	+ +Fhx: 1st degree relative =2x risk, 3rd degree=4x
	+ Personal or +FHx breast or ovarian Ca esp before age 40
	+ Previous breast bx
	+ High breast density
	+ Nullparity; 1st preg>30y.o
	+ Radiation exposure
	+ >5yrs HRT
	+ Breast cancer risk assessment calculator available at <http://www.cancer.gov/bcrisktool/>
* Protective factors
	+ Pregnancy before age 30
	+ Fewer years menstruating
	+ Lactation
* Note promotion of overall healthy lifestyle and women’s health promotion; obesity, alcohol
* Red Flags
	+ Unilateral non-cyclical pain
	+ Unilateral nipple discharge; watery, serous, serosanguineous, single duct
	+ Breast mass: unilateral, hard, immobile, noncystic, skin retraction, dimpling or edema (peau d’orange)
	+ Hx: postmenopausal, previous hx cancer, fhx breast ca
* Screening
	+ Genetic screening
		- BRCA1/2 if +breast AND ovarian ca
		- Strong fhx of br and ovarian ca (Ashkenazi Jew)
		- Fhx male br ca
		- <35y/o
	+ Mammography q1-2yrs-new guideline age 50-69 rather than 40-79
		- Start 10yrs earlier of first age of Br Ca in first degree relative
	+ Breast self-exam no longer routinely advised
* Investigation of breast cancer
	+ U/S🡪cystic vs solid
	+ MRI-high sensitivity poor specificity
	+ Galactogram/ductogram for nipple d/c – ductal lesions
	+ Metastatic work up as indicated – bone scan, abdo u/s, cxr, head CT (or CT chest/abdo/pelvis)
	+ Diagnostic mammogram always indicated even if <50y/o
* Diagnosis
	+ Needle aspiration if palpable, cystic; send for cytology if blood or cyst doesn’t completely resolve
	+ U/S or mammography guided core needle bx (most common)
	+ Fine needle aspiration (FNA) for palpable solid masses, need experienced practioner
	+ Excisional bx- only as 2nd choice to core needle bx
* DDx for breast mass:
	+ Benign
		- Non proliferative: fibrocystic change, cystic mastitis, mammary dysplasia
		- Proliferative - no atypia
			* Fibroadenoma, intraductal papilloma, ductal hyperplasia without atypia
		- Proliferative – with atypia
			* Atypical hyperplasias
		- Others - Fat necrosis, mammary duct ectasia, Montgomery tubercle, abscess, galactocoele, silicone implant, Granulomatous mastitis (TB, Wegners, sarcoidosis)
	+ Breast Cancer
		- Non-invasive: ductal in-situ, lobular in-situ
		- Invasive: ductal, lobular, Paget’s disease, inflammatory ca, male br ca, sarcomas, lymphomas, others (papillary, medullary, mucinous)
* Complications of breast cancer
	+ Mets: bone>lungs>pleura>liver>brain
	+ Biopsychosocial
	+ Treatment or surgical S/E, body changes, fertility, family inheritance implications
	+ Bone health
* Resources and support for patient
* Provide contact info for patient while undergoing diagnosis and treatment
* Supportive care for patient throughout experience

<http://www.cmaj.ca/content/suppl/2007/06/14/158.3.DC1#physicians>

<http://www.bcmj.org/sites/default/files/BCMJ_50Vol4_breastcancer.pdf>

<http://www.cmaj.ca/content/suppl/2005/07/15/172.10.1319.DC1/cpg9patient-final.pdf>

<http://www.cmaj.ca/content/183/17/1991>

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