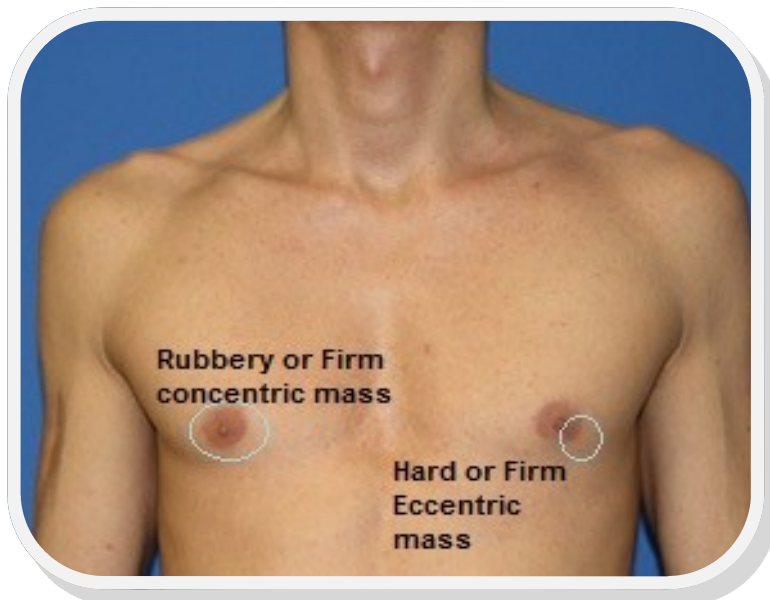


Gynaecomastia

Is it Cancer?

Cancer	Gynaecomastia
Eccentric lump	Concentric lump
Non-painful	Painful / tender (in early stages)
Hard	Rubbery
Very Rare, especially in <40	Common



Early:

- Nipple pain or tenderness, increased sensitivity
- Change in nipple shape – may become bigger; areola may become puffy or conical

Intermediate:

- Tender concentric disc of tissue
- Not always perfectly symmetrical, but tends to surround nipple

Later:

- Tissue less tender

A Breast Symptom,
not a Breast Problem

Gynaecomastia should be approached in the same way that a woman presenting with excess facial hair would be approached. The cause should be identified, and corrected if possible, and consider referral to an endocrinologist.

Cause	Treatment*
Pubertal	Will usually spontaneously resolve <3 years
Hypogonadism	Refer to Endocrinologist
Drug/Lifestyle cause	Remove/correct underlying cause
Idiopathic	Tamoxifen
Obesity	Advise to lose weight
Old age	Normal aging process

* Surgery should be considered a last resort. Surgery- can only be considered for certain cases via the local Commissioning Policy for cosmetic procedures, referral eRS.

List of Agents That Can Cause Gynecomastia

Agents frequently causing gynecomastia:

Antiandrogens	Bicalutamide, flutamide, finasteride, dutasteride
Antihypertensives	Spirolactone
Antiretroviral	Protease inhibitors (saquinavir, indinavir, nelfinavir, ritonavir, lopinavir), reverse transcriptase inhibitors (stavudine, zidovudine, lamivudine)
Environmental exposure	Phenothrin (antiparasitical)
Exogenous hormones	Raised oestrogens (male teenagers, obesity), Low testosterone (elderly males, Klinefelter's syndrome)
Gastrointestinal drugs	H2 histamine receptor blockers (cimetidine)

Agents which may cause gynecomastia:

Antifungal	Ketoconazole (prolonged oral use)
Antihypertensive	Calcium channel blockers (amlodipine, diltiazem, felodipine, nifedipine, verapamil)
Antipsychotic (first generation)	Haloperidol, olanzapine, paliperidone (high doses), risperidone (high doses), ziprasidone
Antiretroviral	Efavirenz
Chemotherapy drugs	Methotrexate, cyclophosphamide, carmustine, etoposide, cytarabine, melphalan, bleomycin, cisplatin, vincristine, procarbazine
Exogenous hormones	Androgens (athletes abuse)
Gastrointestinal drugs	Proton pump inhibitors (omeprazole)

Agents causing gynecomastia less frequently:

Amiodarone	diethylstilbestrol	lisinopril	pravastatin
amphetamine	digoxin	loratadine	pregabalin
aripiprazole	domperidone	methadone	ranitidine
atorvastatin	entecavir	metronidazole	rosuvastatin
captopril	ethanol	misoprostol	sulindac
cetirizine	fenofibrate	MyTosterone®	sulpiride
clonidine	fluoxetine	paroxetine	sunitinib
cyproterone acetate	gabapentin	penicillamine	theophylline
dasatinib	heroin	phthalates	venlafaxine
diazepam	imatinib		

Please also consider lifestyle products such as phytoestrogens (soya-based products, protein shakes in high quantity) and Cannabis use.