

Urologia ao CENTRO

A MEDICINA GERAL E FAMILIAR NO
CENTRO DOS CUIDADOS DE SAÚDE

24 e 25 de maio de 2018
Fundação Bissaya Barreto
Coimbra

ORGANIZAÇÃO
Associação dos Amigos
de Urologia
e Transplantação Renal

Oncologia Urológica

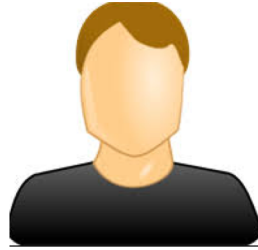
Caso 3

ONCOLOGY

Hugo Antunes

História Clínica

- Homem
- 33 anos
- Bancário
- Casado
- 1 filho

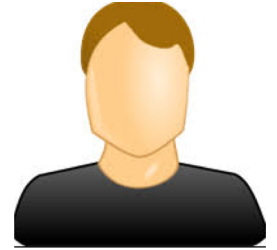


Motivo Consulta: dor mamária bilateral com cerca de 3 meses de evolução

Antecedentes pessoais: fumador (18 UMA)

Antecedentes familiares: pai com DM tipo 2; sem antecedentes oncológicos

História Clínica



Anamnese: dor mamária bilateral com cerca de 3 meses de evolução

noção de aumento do volume mamário bilateral

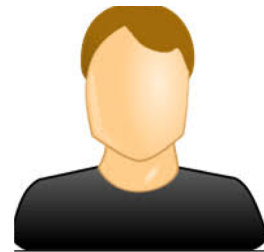
sem galactorreia

nega outras queixas

nega toma de fármacos

nega toma de esteroides anabolizantes ou outras substâncias

nega ingestão de bebidas alcoólicas.



Hipóteses de Diagnóstico?

Table I. Associated causes of gynecomastia.

Physiologic

Neonatal

Pubertal

Ageing

Cancer/oncology

Testicular cancer (Leydig- or Sertoli cell-, orhCG-producing tumours)

Adrenocortical neoplasms

Pathologic

Primary or secondary hypogonadism

Androgen receptor defects

Spinal and bulbar muscular atrophy (androgen receptor mutation)

Refeeding after starvation

Liver disease (cirrhosis)

Renal failure and dialysis

Obesity

Hyperthyroidism

Klinefelter syndrome

Aromatase excess syndrome (familial gynecomastia)

Enzyme defects of testosterone synthesis

Androgen resistance syndromes

True hermaphroditism

HIV

Pharmacological

Exposure to or treatment with exogenous oestrogen

Digestion of food from animals treated with oestrogens (i.e. meat or milk)

Side-effects of other drugs

Idiopathic

J Plast Surg Hand Surg, 2015; Early Online: 1–8
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DOI: 10.3109/2000656X.2015.1053398

REVIEW ARTICLE

Gynecomastia: A systematic review

Anders Fagerlund¹, Richard Lewin¹, Guglielmo Rufolo¹, Anna Elander¹, Fabio Santanelli di Pompeo² & Gennaro Selvaggi¹

¹Department of Plastic Surgery, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, at Sahlgrenska University Hospital, Sweden and ²Plastic Surgery Unit, San'Andrea Hospital, "Sapienza" University, Rome, Italy

Table II. Drugs associated with gynecomastia.

Drug class	Medication
Antibiotics	Isoniazid, ketoconazole, metronidazole, ethionamide
Psychiatric	Diazepam, haloperidol, phenothiazine, tricyclic antidepressants
Hormones	Androgens, oestrogens, anabolic steroids, growth hormone, hCG
Cardiovascular	Verapamil, reserpine, spironolactone, enalapril, nifedipine, captopril, amlodipine, amiodarone, digitoxin, statins, diltiazem, methyl dopa
Chemotherapeutic	Methotrexate, cyclophosphamide, alkylating agents
Gastrointestinal	Proton pump inhibitors, ranitidine, metoclopramide, cimetidine, domperidone
Antiandrogens	Flutamide, finasteride, cyproterone, bicalutamide
Others	Theophylline, auranofin, highly active antiretroviral therapy, sulindac, clomiphene, etretinate, penicillamine, metoclopramide, phenytoin, diethylpropion, marijuana, alcohol, amphetamin, heroin, methadone

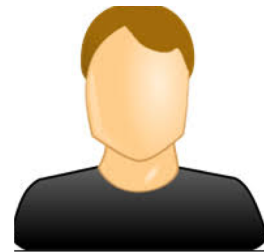
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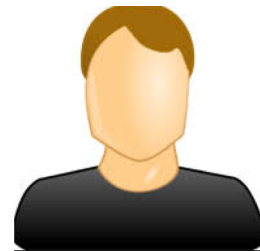
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O que fazer?

História Clínica



Exame Físico: IMC – 22 kg/m²

Aumento do volume mamário, doloroso à palpação, sem nódulos

Boa androgenização

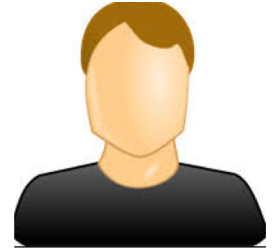
Exame genital: Pénis circuncisado, sem alterações de relevo.

Sem hidrocele ou varicocelo

Testículo direito de dimensões e consistência normais, sem nódulos palpáveis

Testículo esquerdo de dimensões normais, com pequena **zona com < 2 cm**

irregular, com ligeiro desconforto à palpação



O que fazer?

Que ECDs pedir?

Gynaecomastia—pathophysiology, diagnosis and treatment

Harmeet S. Narula and Harold E. Carlson

Narula, H. S. & Carlson, H. E. *Nat. Rev. Endocrinol.* 10, 684–698 (2014); published online 12 August 2014; doi:10.1038/nrendo.2014.139

Box 3 | Diagnostic evaluation of gynaecomastia

History

- Related to breast enlargement: duration of breast enlargement; presence of breast pain or tenderness; worrisome symptoms of breast cancer (bleeding, ulceration)
- Systemic illness: recent abnormal weight loss or weight gain; liver disease; chronic renal failure or dialysis; symptoms of hyperthyroidism; changes in libido, sexual functioning, or other symptoms of hypogonadism; medication use; recreational drug use (for example, marijuana, heroin); occupational, dietary or accidental exposure to estrogen

Physical examination

- Degree of virilization: voice, facial and body hair, muscular development
- Breast examination: true gynaecomastia versus pseudogynaecomastia; signs suspicious for breast cancer; breast tenderness
- Examination of genitalia: testicular size; testicular masses; phallus size and development; pubic hair development
- Stigmata of chronic liver or kidney disease
- Examination of thyroid and signs of hyperthyroidism

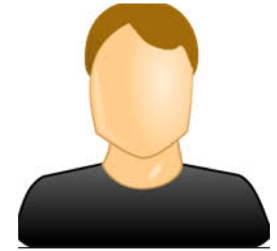
Laboratory evaluation

- Kidney function tests (blood urea nitrogen and creatinine)
- Liver function tests
- Thyroid function tests (thyroid-stimulating hormone with or without free thyroxine)
- Serum levels of testosterone (total and bioavailable), LH, FSH, prolactin
- Serum levels of estrogens (estradiol)
- Tumour markers for germ cell neoplasms (β -hCG)
- Levels of adrenal androgens (serum DHEA-sulphate or urinary 17-ketosteroids)

Radiologic examination*

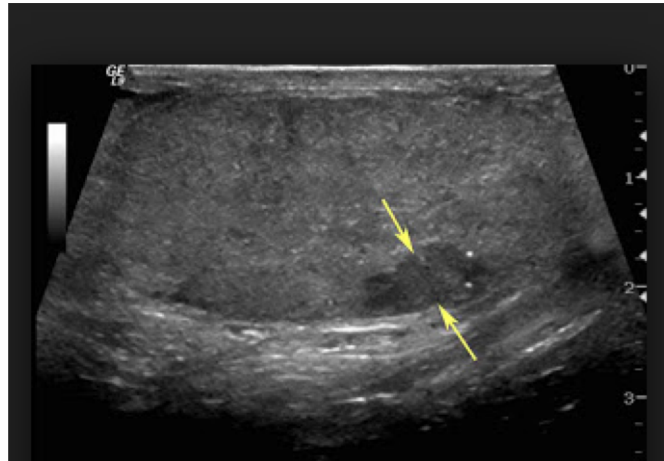
- Mammogram
- Breast ultrasonography

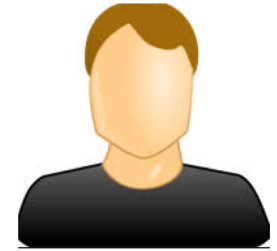
*Radiologic examination is not recommended for routine evaluation of gynaecomastia (see text for detailed discussion). Abbreviations: DHEA, dehydroepiandrosterone; FSH, follicle-stimulating hormone; hCG, human chorionic gonadotropin; LH, luteinizing hormone. Permission obtained from Elsevier Inc. © Narula, H. S. & Carlson, H. E. *Endocrinol. Metab. Clin. North Am.* 36, 497–519 (2007).



Exames complementares

Ecografia escrotal: identifica-se lesão irregular hipocogénica com 16x11x9 mm no testículo esquerdo, muito sugestivo tumor testicular. Testículo direito sem alterações de relevo.





Exames complementares

Estudo analítico: Hemograma N

Testosterona total N – 750 ng/dl (180-880 ng/dl)

Prolactina N

LH e FSH N

TSH e T4 N

Creatinina N

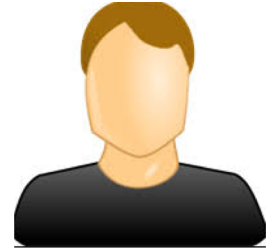
Provas hepáticas N



O que fazer?

Mais ECDs?

Qual a hipótese diagnóstica?



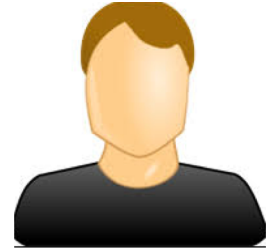
Qual a hipótese diagnóstica?

Tumor testicular esquerdo

Tumores testiculares

- 1% de todas as neoplasias no homem
- 5% dos tumores urológicos
- A maioria são tumores de células germinativas
- Pico de incidência entre os 20-40 anos
- Taxa de cura excelente

Factores de risco: criptorquidia, hipospadias, sub- ou infertilidade, presença de tumor contralateral e história familiar de tumor testicular.



O que fazer?

Referenciação muito urgente à Urologia



Estudo Complementar

Marcadores tumorais: HCG

alfa-fetoprotéina

LDH

Contribuem para o diagnóstico e estadiamento
Têm valor prognóstico
Marcadores normais **não excluem tumor**

TC toracoabdominopélvica: desde que **não atrase** o tratamento do doente
pode ser realizada após o tratamento cirúrgico



Estudo Complementar

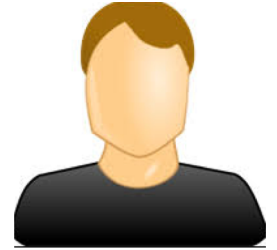
Marcadores tumorais: HCG ↑
alfa-fetoprotéina N
LDH ↑

TC toracoabdominopélvica: sem identificação de qualquer imagem sugestiva de doença sistémica. Sem adenopatias identificadas.

Marcadores tumorais

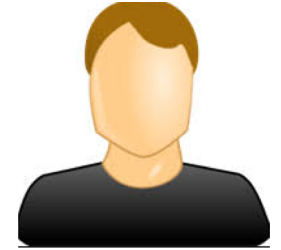
Table 1
Serum tumor marker summary for testicular germ cell tumors

Marker	Weight (Da)	Half-life	Associated GCT subtype (%)	False negative
AFP	70,000	5–7 d	Yolk sac tumor (90) Embryonal Carcinoma (75)	Liver disease Hereditary persistence of AFP Hepatocellular, lung, pancreatic, colon, and gastric carcinomas
hCG	38,000	24–36 h	Choriocarcinoma (100) Embryonal carcinoma (40–60) Seminoma (10–20)	β subunit of LH cross-reactivity Hypogonadism Marijuana abuse Hepatocellular, breast, pancreatic, gastric, kidney, and bladder carcinomas
LDH	134,000	10–72 h	All GCT (~50)	Liver and congestive heart failure Hemolytic anemia Pancreatitis Collagen vascular disorders Muscular dystrophies
PLAP	60,000–70,000	2–7 d	Seminoma (30–60)	Tobacco abuse



E agora?

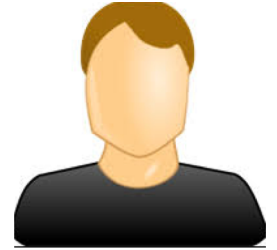
Biopsar? Operar? Depende dos valores dos marcadores tumorais?



E agora?

Orquidectomia Radical Urgente

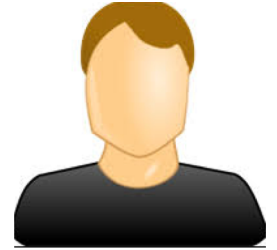




E agora?

Orquidectomia Radical Urgente

Mas **antes disso...**



Mas antes disso...

Criopreservação de esperma

Criopreservação de espermatozóides

“Cryopreservation and the subsequent storage of semen **samples is the main option for fertility preservation** in men (and boys producing sperm in the ejaculate) who are undergoing chemotherapy or radiotherapy regimes that might affect gonadal function”.

“Patients should be fully informed about the risks of infertility before potential gonadotoxic treatment, and that sperm banking **should be considered and available for all patients** when future fertility is an issue.”

Fertility preservation 1

Fertility preservation in men with cancer

Herman Tournaye, Gert R Dohle, Christopher L R Barratt

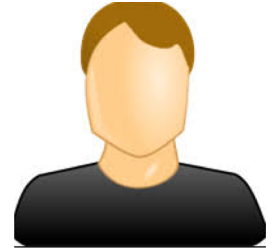


Lancet 2014; 384: 1295-301



Pós-operatório

- Alta ao primeiro dia pós-operatório
- Consulta às 3 semanas com repetição dos marcadores tumorais
 - **normalização de todos os valores**
- Doente clinicamente bem, sem queixas
- **Histologia:** tumor misto de células germinativas, com **60% de componente embrionário** e 20% de seminoma, com identificação de **invasão vascular**.



É necessário algum tratamento
adjuvante?

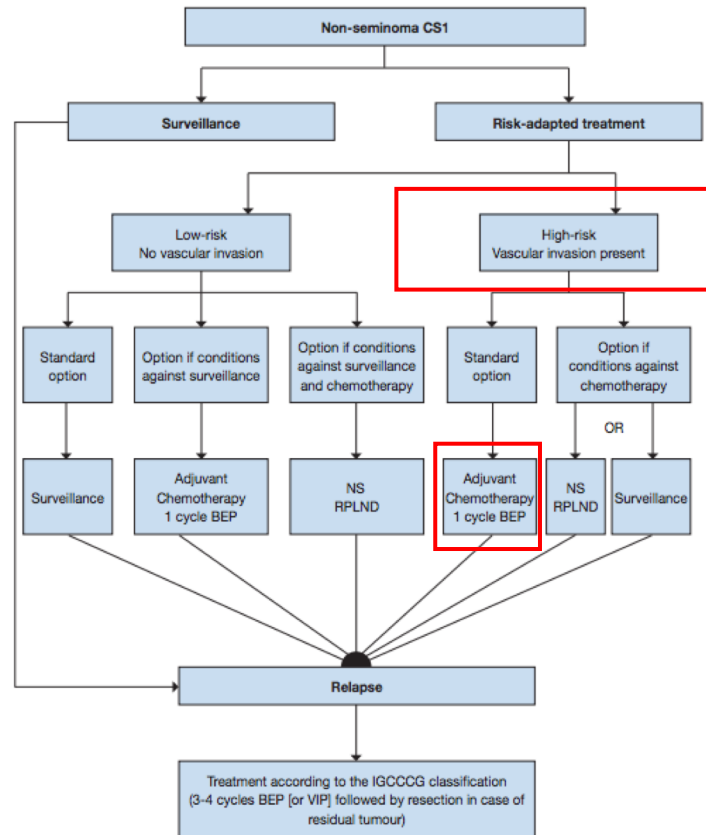
É necessário algum tratamento adjuvante?

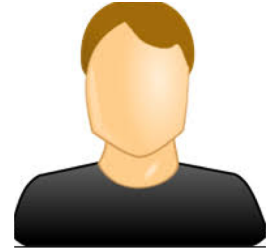
Table 4.3: Prognostic-based staging system for metastatic germ cell cancer (International Germ Cell Cancer Collaborative Group [53])*

Good-prognosis group	
Non-seminoma (56% of cases) 5-year PFS 89% 5-year survival 92%	All of the following criteria: <ul style="list-style-type: none"> • Testis/retro-peritoneal primary • No non-pulmonary visceral metastases • AFP < 1,000 ng/mL • hCG < 5,000 IU/L (1,000 ng/mL) • LDH < 1.5 x ULN
Seminoma (90% of cases) 5-year PFS 82% 5-year survival 86%	All of the following criteria: <ul style="list-style-type: none"> • Any primary site • No non-pulmonary visceral metastases • Normal AFP • Any hCG • Any LDH
Intermediate-prognosis group	
Non-seminoma (28% of cases) 5-year PFS 75% 5-year survival 80%	Any of the following criteria: <ul style="list-style-type: none"> • Testis/retro-peritoneal primary • No non-pulmonary visceral metastases • AFP 1,000 - 10,000 ng/mL or • hCG 5,000 - 50,000 IU/L or • LDH 1.5 - 10 x ULN
Seminoma (10% of cases) 5-year PFS 67% 5-year survival 72%	All of the following criteria: <ul style="list-style-type: none"> • Any primary site • Non-pulmonary visceral metastases • Normal AFP • Any hCG • Any LDH
Poor-prognosis group	
Non-seminoma (16% of cases) 5-year PFS 41% 5-year survival 48%	Any of the following criteria: <ul style="list-style-type: none"> • Mediastinal primary • Non-pulmonary visceral metastases • AFP > 10,000 ng/mL or • hCG > 50,000 IU/L (10,000 ng/mL) or • LDH > 10 x ULN
Seminoma	No patients classified as poor prognosis

*Pre-chemotherapy serum tumour markers should be assessed immediately prior to the administration of chemotherapy (same day). PFS = progression-free survival; AFP = alpha-fetoprotein; hCG = human chorionic gonadotrophin; LDH = lactate dehydrogenase.

Figure 1: Risk-adapted treatment in patients with clinical stage 1 non-seminoma NSGCT CS1 [148]*





Follow-up

Avaliação regular em consulta de Urologia Oncológica

- Avaliação dos marcadores tumorais
- TC toracoabdominopélvica
- Exame genital. Palpação testicular dta

Obrigado



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