of a 14cm immature teratoma with steatonecrosis nodules in the left ovary. The classification was stage IB according to FIGO 2018. A staging surgery was then scheduled. The final pathological examination did not show that the tumor was limited to the ovaries. The patient received chemotherapy with a favorable evolution. We are currently at 2 years of follow-up and the response is favorable.

**Conclusion:** The malignant transformation of dermoid cysts is linked to prolonged exposure of dermoid o cysts to numerous carcinogenic factors. It appears that any diagnosed ovarian dermoid cyst must be resected.

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**Abstract ID: 216**

**Estetrol reduces cell proliferation and migration in breast cancer spheroids model**

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Estrogens are known to stimulate the growth of breast cancer (BC), but they are also used effectively to treat this disease: this has been termed the 'estrogen paradox'. Estetrol (E4) acts in a dual mode, exerting estrogenic effects on the endometrium and central nervous system, while antagonizing the effects of estradiol in the breast. This effect is similar to tamoxifen (Tmx), a selective estrogen receptor modulator (SERM) widely used as adjuvant endocrine therapy in BC.

Traditional two-dimensional (2D) cell cultures lack the proper environmental context, leading to changes in cell function. On the contrary, the three-dimensional (3D) in vitro model developed and used in this work is reliable and sophisticated, mimicking the *in vivo* situation. The aim of this study was to evaluate whether E4 have an anti-tumor activity in T47D ER+ BC cells on 3D culture systems.

T47D spheroids were cultured on a 96-well low attachment plate. All experiments were realized in DMEM phenol red-free media with 5% of charcoal stripped FBS. After starvation, cells were treated with increasing concentrations (-6 to -9M) of E4, 17β-estradiol (E2) and Tmx. To evaluate combined treatments, E4-6M, E2-9M, Tmx-6M concentrations were chosen.

We evaluated T47D 3D cells clonogenicity, proliferation, migration. Proliferation/growth was measured as feret diameter, while mammosphere based migration assay as radial migration index.

We observed a significant increase of mammosphere area with E2, a significant reduction with Tmx (particularly -6 and -7M), and non-significant differences with E4 vs control. Then, no differences were observed when we evaluated mammosphere formation efficiency. Then, As for 3D migration, E2-treated mammospheres showed a significantly increased radial migration index (particularly -9 to -7M) vs control; non-significant differences were found between E4 or Tmx vs control.

With combined treatments interesting results were found. In the presence of E4 or/+ Tmx, E2 growth and migration effects were significantly reduced. This reduction was less vs control when the mammosphere area was examined.

In conclusion, E4 do not stimulate 3D-cell growth and migration, in addition, E4 counteracted the stimulatory actions of E2. This contributes to the emerging hypothesis that E4 is a natural estrogen with selective tissue activity (NEST) on breast. Further studies are needed to evaluate the introduction of E4 combined or not to Tmx as treatment to treat endocrine-sensitive BC.

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**Meningioma under progestin treatment, what attitude to adopt?**

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**Introduction:** Meningioma is the most frequent primary tumor of the central nervous system in adults. The main risk factors for meningioma include endogenous (sex steroids) and exogenous hormones. The association between meningiomas and 3 progestin has already been established: cyproterone acetate, nomegestrol acetate and chlormadinone acetate. In addition, several cases of spontaneous tumor regression after cessation of treatment have been reported in the literature.The aim of this study was to review the status of these hormone-induced tumours with particular reference to their management.

**Discussion:** The main pathophysiological mechanism involved in the genesis and growth of these meningiomas is the expression of progesterone receptors by 70% of them with a higher expression in women, essentially in low grade meningiomas with low proliferation index.

The higher the cumulative dose and the longer the duration of exposure, the higher the risk of hormone-induced meningioma. After 1 one year of exposure, the risk is increased (X 12 from 5 years of treatment with nomegestrol acetate, X 7 from 3.5 years of treatment with chlormadinone acetate, and X 7 from 6 months for cyproterone acetate). There is also an association between prolonged exposure to these treatments above a certain threshold (25 mg/d of cyproterone acetate, 3.75 to 5 mg/d of nomegestrol acetate and 2 to 10 mg/d of chlormadinone acetate) and surgery for meningioma, this risk being greater for cyproterone acetate and then for nomegestrol acetate and chlormadinone acetate.

Secondly, a tendency for tumor regression has already been observed after cessation of treatment, with a greater regression for meningiomas induced by cyproterone acetate. This notion is essential to be aware of in order to avoid inappropriate management.

If an asymptomatic or paucisymptomatic meningioma is found, it is recommended to discontinue the medication and to perform MRI monitoring. If symptoms are severe, surgical treatment is recommended as a first step.

**Conclusion:** Meningioma is a rare tumor whose genesis and growth may be promoted by commonly prescribed progestin-only hormonal treatments. If used, special precautions must be taken to limit the risk of meningioma: use of the minimum effective dose for a limited period of time under clinical and iconographic surveillance. In the event of the appearance of a meningioma under progestin, any medication containing a progesterone agonist must be permanently suspended.

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**A potent non-hormonal option for the treatment of postmenopausal vaginal dryness with high tolerability**

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Genitourinary syndrome of menopause (GSM) is considered a chronic condition with urogenital implications caused by estrogen deficiency typically after onset of menopause. Vaginal dryness accompanied by burning and itching is one of the most prevalent and bothersome symptoms of GSM. Affected women suffer from reduced