Case (467) Hydrometrocolpos secondary to cervical cancer:

presentation of a rare condition in the emergency setting.

Authors A. Dorca Duch, D.e. Nova Vaca, M. Pérez Rubiralta, M.m. Serra

Salas, I. Rodríguez Caamaño, M.e. De Lama Salvador.

Centre Hospital Universitari De Bellvitge.

CASE PRESENTATION

A 63-year-old female, presented to the emergency department complaining about abdominal pain in the last 2-3 months, centered in the mesogastrium, complicated with emesis in the past 3 days. She had a prior significant clinical history of three cervical conizations due to high-grade squamous cell atypia in previous cervical smear.

Physical examination revealed palpation of a large abdominal mass. The analysis revealed acute kidney failure with creatinine values having gone up to 330 μ mol/L from normal previous results.

Ultrasound was performed and a bilobulated cystic mass was demonstrated, with a maximum diameter of 30 cm, thick walls but no mural nodule formation or hyperemia. Bilateral grade III ureterohydronephrosis, and polycystic adnexal lesions were also identified as significant findings.

CT scan showed a distended uterus and vagina with abundant fluid content, compatible with an hydrometrocolpos, conditioning secondary mass effect on the bladder and both ureters. Bilateral adnexal polycystic lesions corresponded to distended fallopian tubes with associated inflammatory findings consistent with secondary pyosalpinx.

Targeted gynecological physical examination was performed and cannulation of the cervix was able to evacuate the intrauterine contents (up to 1 liter of fluid), thereby resolving the symptoms and the kidney failure. Further testing with PET-CT depicted diffuse hypermetabolic thickening of the uterine cervix compatible with neoplasia.

Pelvic MRI showed a soft tissue growing lesion inside the endometrial cavity, protruding into the cervical canal, FIGO IIB stage. Cervical biopsies confirmed squamous carcinoma. Cervical cancer was treated with radiotherapy and brachytherapy.

DISCUSSION

Hydrometrocolpos represents fluid accumulation inside vagina and uterus, secondary to vaginal or external genital anomalies that prevents correct drainage of internalgenital secretions. It is typically observed during the neonatal period, being the imperforate hymen the most common cause.

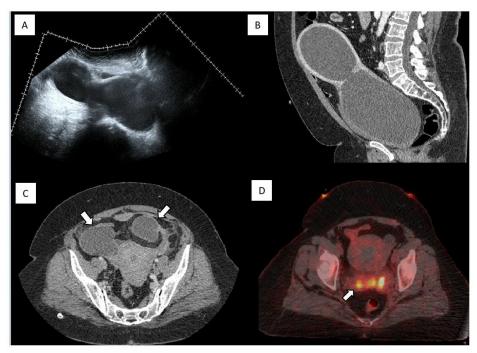
Clinically, it produces abdominopelvic cystic masses, which can associate hydronephrosis and intestinal obstruction due to compression. However, in adult life, intrauterine fluid collections are associated with obstructive endometrial and cervical cancers, especially in postmenopausal women.

Non neoplastic etiologies can also be responsible for hydrometrocolpos, such as cervical stenosis secondary to surgical procedures (cervical conization or endometrial ablation), radiotherapy or atrophy occurring in menopause. Other causes must also be considered, such as endometrial polyps, infection or submucosal fibroids.

Life threatening complications such as tubo-ovarian abscess can be observed in this condition, secondary to ascending infection of the adnexa or endometrial cavity due to the neoplastic obstruction.

CONCLUSION

Hydrometrocolpos secondary to cervical cancer represents a rare condition to diagnose in the emergency setting causing an abdominopelvic mass, associating compression of neighboring structures. Neoplastic origin, especially in adult women, must be in the differential diagnosis.



Hydrometrocolpos Secondary to Squamous Cell Carcinoma of the Cervix. A coronal view of the distended anechoic uterus in ultrasound (A) was the first diagnostic exploration. Sagittal CT scan (B) depicts better the distended endometrial cavity with low attenuation homogenous material, no clear malignant lesions were detectable. Axial CT scan performed after gynecological drainage of the endometrial cavity (C) depicts the distended bilateral adnexa (Arrows in C) with associated peripheral fat stranding and free fluid laminae suggestive of secondary obstructive pyosalpinx. Cervical hypermetabolic foci were detected in a ¹⁸F-FDG PET-CT scan which further testing and biopsy demonstrated to be squamous cell carcinoma of the cervix (Arrows in D).

BIBLIOGRAPHY

- Nalaboff K, Pellerito J, Ben-Levi E. Imaging the Endometrium: Disease and Normal Variants. RadioGraphics 2001; 21:1409–1424.