Case 394

4. Brenner tumor

【Progress】

She was referred to a medical diagnosis of benign ovary tumor with no relation to anal bleeding. She was under watchful observation of the ovary tumor and anal bleeding.

【Discussion】

Brenner tumor is composed of transitional-cell-like tumor accompanied with abundant solid interstitial (1, 2). In the initial small stage, the tumor is solid and as it grows, cystic components emerge, becoming a mixed tumor of solid and mucinous cyst. Further, the solid component of the tumor contains calcification with 50-70% incidence (3,4).

According to world health organization classification. Brenner tumors are graded into benign, intermediate, and malignant. Benign Brenner tumor is most, while malignant Brenner tumor is rare (1, 2).

Brenner tumor is depicted low signal intensity on T2WI, reflecting much fibrous interstitial. ADC values are useful to differentiate benign from malignant. It is reported that ADC values of Brenner tumor are 0.8 to 1.6, depending on cell density, malignant potential; less than 1.2 of ADC values indicate malignant; greater than 1.2 or indicates benign (5, 6). Further, Brenner tumor emerges accompanied by other different ovarian tumors like mucinous cyst adenoma or adenocarcinoma (6). Then, Brenner tumor is, often found incidentally.

The characteristic images of Brenner tumor are as follows: low signal intensity on T2WI or fat suppression T2WI, delayed enhancement on Gd-enhanced MRI (3, 4). The differentiation from other ovary tumors like fibroma or thecoma that contains abundant fibrous interstitial. In case of ovary fibroma, ascites is known to often be associated, called Meigs syndrome. Calcification is more included in Brenner tumor than fibroma or thecoma.

Our patient has bilateral cysts in the upper center of vagina surrounding urethra, compatible with Skene cysts. Skene glands develop in adults and locate as a pair, lateral to the urethra opening (meatus). They drain into urethra or near the urethral opening. They swell and ejaculate fluid during sexual activity (7). Further, when examined with electron microscope, Skene glands show the similar gland structure as prostate in male. Then, they are called as female prostate (7, 8). When Skene gland duct is obstructed due to infection, Skene gland cyst is formed, followed by abscess, described as Case 28. Skene cysts are depicted as slightly high signal intensity on MRI with fat suppression T2WI in our patient.

【Summary】

We presented a seventy-year-old female presented in our hospital for anal bleeding. A solid tumor with both components of calcification and cyst corresponded to right ovary, and bilateral cysts corresponded at vagina are depicted on CT. It is borne in mind that Brenner tumor is composed of transitional-cell-like tumor with much fibrous solid and calcification. As it grows, cystic components emerge. Skene glands in female surround urethra like prostate glands in male.

【References】

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