

ple and reproducible findings we never misdiagnosed an ovarian cancer in the published studies¹⁻³ and in >500 persistent ovarian masses undergoing surgery in our department from 1991. A very low risk of misdiagnosis should be always present but can be further reduced by thorough inspection at laparoscopy characterized by a high sensitivity and by selecting a population with a low risk of ovarian malignancy, such as patients <39 years old. Operative laparoscopy is demonstrated to be safe and to have benefits for the patient undergoing surgery for simple cysts, ovarian endometrioma, and dermoid cyst in the form of reduced postoperative pain, shorter hospital stay, and faster recovery. For these reasons, in premenopausal women with a persistent ovarian mass it is correct to perform operative laparoscopy on those patients in whom preoperative transvaginal ultrasonography identifies the characteristic findings of endometriomas and dermoid cysts.

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Reply

To the Editors: We read with great interest the comment of Guerriero et al. on our article. The authors state that the prevalence of endometrioma and dermoid cysts in premenopausal women with ovarian cysts is 33% and 14%, respectively. This conclusion is based on their own data of 118 patients.¹ However, to our knowledge, there are no published reports on the incidence and prevalence of ovarian tumors in the premenopause. Consequently, no reliable data on the prevalence of dermoid cysts and endometriomas are currently available. In our own study ($n = 1072$) we identified a rate of 11.3% endometriomas and 6.0% dermoid cysts. Although our number of analyzed ovarian cysts is much larger than that of Guerriero et al., we would not claim to have verified the true prevalence of endometriomas and dermoid cysts.

The existing variability of the prevalence of endometrioma is illustrated by the authors themselves, who reported 1 year earlier a prevalence of 24%.² However, dermoid cysts and endometriomas are also regarded in our opinion as common cystic ovarian tumors. Furthermore, Guerriero et al. stated that the presence of a

round-shaped homogeneous hypoechoic "tissue" of low-level echoes with a clear demarcation from the parenchyma and without papillary proliferations is characteristic of endometrioma. We agree with the authors that there is no doubt that an endometrioma can present an ultrasonographic feature as described here. However, in our own data out of 122 histologically verified endometrioma only 43% showed the "typical" ultrasonographic feature of a monolocular cyst with homogeneous internal echos. As many as 38% of the endometriomas did not present any internal echos. Multilocular cysts with or without internal echos were identified in 24% and cystic solid findings in 16% of analyzed cases. Three endometrioma had been classified ultrasonographically as purely solid. Consequently, we suggest that there is no single "classic" ultrasonographic feature of an endometrioma. Guerriero et al. believe that they have identified a strong correlation between ultrasonography and surgery (κ value 0.84). However, their findings of a sensitivity of 83% and a specificity of 89% were based on 24 documented endometriomas.² Regarding the low incidence of ovarian cancers, we believe that these findings do not support the conclusion that preoperative ultrasonography eliminates the risk to operate on an ovarian cancer. This problem is also illustrated by the data of our study. We have investigated 240 monolocular cysts with homogeneous internal echos that fulfill the ultrasonographic criteria of an endometrioma as stated by Guerriero et al.: 63.8% were found to be functional cysts, only 28.3% retention cysts including endometrioma, 7.5% benign neoplasia, and 0.4% malignancies. There is no doubt that the risk for a malignancy in this group is very low, but it is an existing risk that we have to take in account. The ultrasonographic features of dermoid cysts have nearly the same variability. Nevertheless, we agree that the described "classic" ultrasonographic feature exists in the majority of cases. We found this feature in 88% of the dermoid cysts in our study ($n = 64$). However, 12% of the dermoids may be misdiagnosed.

In conclusion, we agree with Guerriero et al. that the preoperative application of transvaginal ultrasonography is useful. However, to establish ultrasonographically a histologic diagnosis preoperatively means to overstress a method and to accept to be mislead clinically by "typical" ultrasonographic features.

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