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[Culture and identification of nanobacteria in bile]

[Article in Chinese]

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OBJECTIVE: To study the distribution and identification of nanobacteria in bile and to evaluate the identifying methods of nanobacteria. **METHODS:** RPMI1640 culture or RPMI1640 culture with 10% heat-inactivated gamma-FBS was added into 75 samples of cystic bile from gallbladders resected in operation. Nanobacteria were identified by immunohistochemical staining, transmission electron microscopy (TEM), and calcific staining. **RESULTS:** Nanobacteria were found in 45 bile samples with a positive rate of 61.3%. The positive rate of nanobacteria was 75.7% among 37 bile samples with white precipitate adhering to the tube, and was 47.4% among the samples with flocculent precipitate or without precipitate ($P < 0.05$). The immunohistochemically confirmed presence of nanobacteria was re-confirmed by TEM in all the positive samples. The positive rate, sensitivity, specificity, false positive rate and false negative rate of calcific staining were 38.7%, 58.7%, 93.1%, 6.9% and 41.3% respectively. **CONCLUSION:** Immunohistochemistry with monoclonal antibody of nanobacteria associated with TEM is useful in identifying nanobacteria. Calcific staining is of great value to identification of nanobacteria. Precipitation of white floccules adhering to the tube is an important microbiological characteristic of nanobacteria.

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