

SYSTEMATIC REVIEW

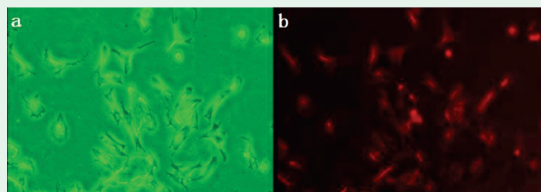
Does short preoperative statin therapy prevent infectious complications in adults undergoing cardiac or non-cardiac surgery? A meta-analysis of 5 randomized placebo-controlled trials

Li et al failed to find sufficient evidence to support the association between statin use and postoperative infectious complications. The absence of any evidence for a beneficial effect in available randomized trials reduces the likelihood of a causal effect as reported in observational studies. This systematic review of the literature was retrieved via PubMed, Embase, and the Cochrane Library (1980 to 2015), and the reference files were limited to English-language articles. They used a standardized protocol, and a meta-analysis was performed for data abstraction. The aggregated results of these studies failed to show significant differences in postoperative infection when a fixed effects model was used (RR: 0.39; 95% CI: 0.08-1.97, $p=0.26$).

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ORIGINAL ARTICLES

Inhibitory effect of Bailing capsule on hypoxia-induced proliferation of rat pulmonary arterial smooth muscle cells



Identification of rat pulmonary arterial smooth muscle cells (PASMCs). Isolated PASMCs were fixed and subjected to immunofluorescence with specific alpha smooth muscle actin (α -SMA) antibody. A) The cells were observed under the optical microscope; B) The red-stained myofilaments observed under the fluorescence microscope represented the positive antigen of α -SMA (400 \times magnifications).

Li et al conclude that Bailing capsule can inhibit hypoxia-induced PASMC proliferation possibly by suppressing ET-1 and ROS production and by inhibiting expression of PCNA, c-fos, and c-jun. These results suggest that Bailing possess antiproliferative property, which is probably one of the underlying mechanisms of Bailing capsule for the clinical treatment of chronic obstructive pulmonary disease. Ten healthy adult male Wistar rats were administrated with gastric perfusion of Bailing capsule to obtain serum containing the tested drugs. Proliferation of pulmonary arterial smooth muscle cells proliferation was measured using cell counting kit-8 assay. Production of reactive oxygen species (ROS) in rat PASMCs was determined through a fluorometric assay, whereas production of endothelin-1 (ET-1) was detected by ELISA and quantitative real-time PCR (qRT-PCR). Expression of proliferating cell nuclear antigen (PCNA), c-fos, and c-jun in PASMCs was also determined using immunohistochemistry staining and qRT-PCR.

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Molecular subtypes of breast carcinoma in Saudi Arabia. A retrospective study

Alnegheimish et al conclude that luminal A tumor was the most common molecular subtype and HER2-positive was the least common. Most lobular carcinomas were luminal A tumors. Human epidermal growth factor receptor 2-positive and triple negative tumors had a higher histologic grade and a larger tumor size at diagnosis, and they were more common in women under 50 years. Carcinoma-in-situ was least common in triple negative tumors. We found no association between lymph node status and molecular subtypes. The most prevalent subtype was luminal A (58.5%), followed in descending order of frequency by triple negative (14.8%), luminal B (14.5%), and HER2-positive (12.3%). The average age at diagnosis was 49.8 years, and average tumor size at diagnosis was 3.19 cm.

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CASE REPORT

Invasive mucormycosis in chronic granulomatous disease



Rhizopus spp. grown from intraoperatively obtained lung tissue specimen

Al-Otaibi et al discuss that Mucormycosis is a rare opportunistic fungal infection that occurs in certain immunocompromised patients. They present 2 cases of invasive mucormycosis due to *Rhizopus* spp. in patients with chronic granulomatous disease (CGD) and discuss their clinical presentation, management challenges, and outcomes.

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