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Methods

1. Antibiotic susceptibility test using the disk diffusion
2. Biofilm assay by microtiter plate 24h & 48h.
3. Preparation of supernatant *Bacillus coagulans*
4. RT-qPCR technique
5. Investigating the genetic relatedness of *vibrio cholerae* strains using PFGE technique

Outcomes

40 isolates were approved and *vibrio cholerae*

Antibiotic susceptibility tests (Disk Diffusion)

Intermediate to 52.5% FEP & 7.5% MEM antibiotics were spotted

Biofilm 24h & 48h

24h : All biofilm isolates were weakend
48h : There were 3 strong biofilm isolates, 6 moderate & 31 isolates weak

Bacillus coagulans supernatant was separated. Test BCA & FTIR

Comparative gene expression & treatment by supernatant were assessed between the selected isolates

PFGE was performed to assess genetic diversity

All isolates showed the same banding pattern.

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