

Plasmid-mediated Phenotypic Noise Leads to Transient Antibiotic Resistance in Bacteria

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Received: March 25, 2024

Published: May 02, 2024

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Abstract

Bacteria use diversified strategies, including the amplifying of drug-resistance genes. In this paper, we showed that multicopy plasmids, often carrying antibiotic resistance genes in clinical bacteria, can rapidly amplify genes, leading to plasmid-mediated phenotypic noise and transient antibiotic resistance.

Keywords: Plasmid; Infection; Patients; Genetics; DNA; Plasmid R

Introduction

Laboratory data showing susceptibility of plasmid.

Susceptibility of the Bacterial Strains to Ethidium Bromide.

Bacteria of Isolates	SIC, $\mu\text{g/mL}$	MIC, $\mu\text{g/mL}$ [1]
<i>A. baumannii</i>	62.5	125
<i>A. baumannii</i>	250	500
<i>P. fluorescens</i>	1000	2000
<i>P. aeruginosa</i>	1000	2000
<i>A. baumannii</i>	125	250

Table 1

Identification of Susceptibility towards antibiotics.

Figure 1 Shows the plasmid study of antibiotic resistance towards drugs like ampicillin, ciproflaxin and many more [2].

Plasmid isolation

Figure 2 it shows the nineteen restrains against all antibiotics and were isolated [3].

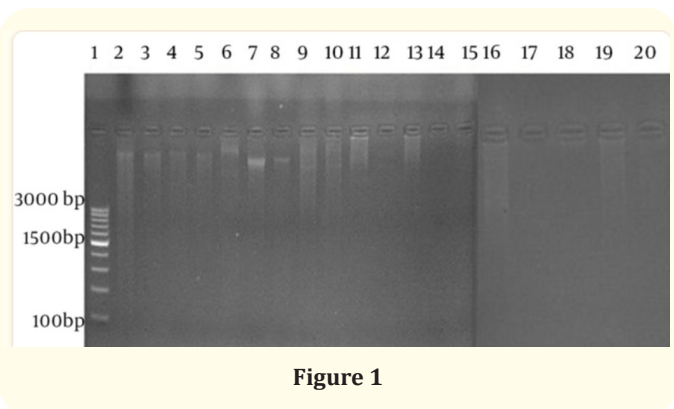


Figure 1

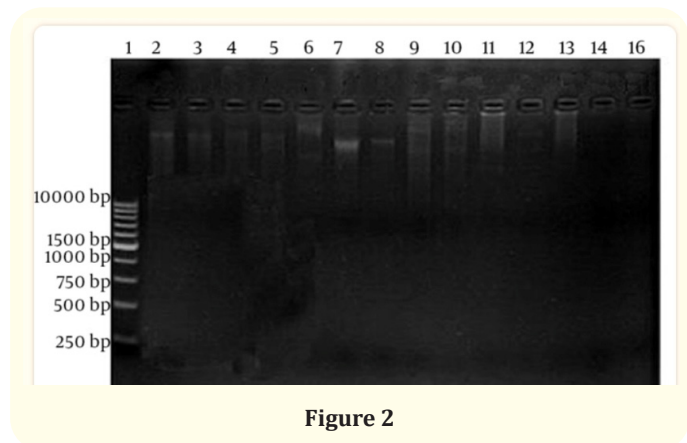


Figure 2

Line 1, Smart marker (of 100-3000bp); Line 2 to 5, *A. baumannii*; Line 6 and 7, *P. aeruginosa* [4]; Line 8 and 9, *K. pneumoniae* harbored two plasmid bands; Line 18, 19 [5] and 20: *P. fluorescens*.

Plasmid curing

Isolated bacteria were showing resistance to antibiotics and were selected for curing [6]. Results were *A. baumannii* and *P. aeruginosa* were cured (with 60% frequency) whereas; *P. fluorescens* was not cured (60%) [7].

Determination of plasmid mediated antibiotic resistance

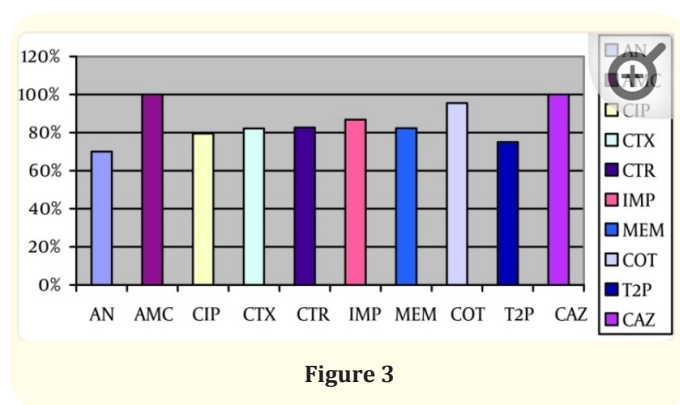


Figure 3

Figure 3 shows the determination of bacteria and presence of plasmid r and [8] antibiotic resistance and the graph shows percentage of bacteria having [9] resistance towards a particular drug and can lead to the infection or multidrug diseases [10].

Cure of plasmid r

Genetics resistance of bacteria towards drug and human cure this disease by genetic editing of antibodies and making them highly susceptible towards bacteria.

Discussion

- Resistance plasmid development
- Cure for r plasmid
- Plasmid experimentation

Conclusion

Role of r plasmid in bacteria and its development.

Conflict

Author declare their is no conflict of interest.

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