

## Disc antibiogram test with graded plate method

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### Abstract

**Background and objectives:** Halo interference around antibiogram disc is one of the problems seen in Agar media. This study aimed at applying graded plate method to reduce this problem.

**Material and Methods:** Forty-eight millimeter plates, before putting disc, were graded and the location of discs was determined. Instead of full disc, we used half-disc and then compared the haloe interference, based on clinical and Laboratory Standard Institute (CLSI), of *Klebsiella Pneumoniae* in the presence of nine different antibiotics.

**Results:** The tests performed on *Klebsiella Pneumoniae* show that five antibiotics such as Enrofloxacin (24mm), Flumequine (12mm), Furazolidone (22mm), ampicillin (22mm) and Florfenicil (22mm) cause non-growth haloes while none of them has interference haloe when we use the new method.

**Conclusion:** According to results, the graded plate not only has negative effect on Antibiogram results but also is careful and decrease the interference produced by previous methods and its efficacy is increased up to %17.64 when we use 84 diametered Plate.

**Keywords:** Antibiotic, Disc diffusion test, Dispensing disc, Non-growth haloes, Non-growth haloes interference, Plate