



Study Antibacterial Activity of *Bifidobacterium* spp. against some pathogenic bacteria isolated from patients with Cardiac Catheterization *in vitro*

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Abstract: Evaluation *in vitro* antibacterial activity of *Bifidobacterium* spp liquid against some pathogenic bacteria isolated from patients with diagnostic and therapeutic cardiac catheterization. A total of 45 samples were randomly collected from different imported and domestic dairy products source, 5(11.11%) positive sample of *Bifidobacterium* spp were obtained from yoghurt product, The study was included getting 89 patient from patients cardiac catheterization unit in Imam Hussain Teaching Hospital in holy city Karbala, and from both sex (male and female) of different ages ranged between (29-75) years, due to the absence of a local study on pathogens isolated from cardiac catheterization patients. Perform test blood culture before and after the catheterization. These tests included diagnostic catheterization samples 66 (74.16%) has given 14 (58.33 %), and 15 (62.5 %) infected, and therapeutic catheterization samples 15 (16.85%) has given 6 (25 %) infected for blood culture before and after the catheterization, while both the diagnostic and therapeutic catheterization samples 8 (8.99%) the results were given 4 (16.67 %), 3 (12.5 %) infected respectively. It became clear from the results after the sample cultivations on the enrichment and differential media that 89 patients gave 24 (26.97 %) positive sample for bacterial cultivation, and two of them showed two types of bacteria to become 26 isolated bacterial, isolates were diagnosed 11 (24.31%) gram positive, 15 (57.69 %) gram negative. and estimate the inhibition activity of *Bifidobacterium* spp against *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Pseudomonas aeruginosa*, *E coli*, *Klebsiella pneumoniae*, *Serratia marcescens* isolated from cardiac catheterization by wells in agar. All of which showed notable sensitivity to the *Bifidobacterium* spp liquid bacteria where inhibition diameters ranged between (24, 25, 21, 24, 22, 23,) mm respectively.

Keywords: *Bifidobacterium* spp, antibacterial activity, cardiac catheterization, *in vitro*.