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**Title:** The level of bronchoalveolar lavage fluid prostaglandine E2; Is it diagnostic of bronchogenic carcinoma?

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**Body:** Lung cancer is the most common cause of cancer mortality. It constitutes 12.8% of cancer cases and causes 17.8 % of cancer death, global incidence of lung cancer is increasing 0.5% per a year.

Prostaglandins are found in most tissues and organs and produced by nucleated cells. Prostaglandins are autocrine or paracrine hormones which are locally acting messenger molecules. They differ from hormones in that they are not produced at a discrete site but in many places throughout the human body. Prostaglandins are potent, have a short half-life before being inactivated and excreted. Increased amounts of PGE2 are produced in several pathologic conditions, including inflammation, arthritis, tissue injury and wide variety of cancers. **Subjects and methods:** The study was conducted on forty subjects; including 20 patients with bronchogenic carcinoma (Group 3), 10 patients with non-malignant lesions (Group 2), and 10 healthy control subjects (Group 1). All subjects were submitted to fiberoptic bronchoscopy with bronchoalveolar lavage was done and examined for prostaglandin E2. **Results:** PGE2 level was significantly higher in BALF of group III (malignant group) compared to group I & II, with no significant difference between group I and group II. **Conclusions:** Bronchoalveolar lavage level of PGE2 was significantly increased in patients with bronchogenic carcinoma.

Mean values ( $\pm$ SD) and Statistical comparison of BALF level of PGE2 in groups I, II and III.

	PGE2 level	PGE2 level	ANOVA	ANOVA
	Range	Mean + SD	F	p value
GI	25-40	32.6+8.11	14.620	0.001
GII	40-60	47.53+8.60	14.620	0.001
GIII	150-280	199.9+22.8	14.620	0.001

Ref. 1-Dubey S and Powell CA: Update in lung cancer 2008. Am J Respir Crit Care Med 2009; 179(10):860-8.