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## Abstract Reproduction Form B-1

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City	Department of Surgery, University of Newcastle, Newcastle Upon Tyne, UK
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Title (type in	LOCALISED REGIONS OF INCREASED NERVE GROWTH
CAPITAL LETTERS)	FACTOR EXPRESSION (NGF) IN DETRUSOR OF PATIENTS
	WITH DI.

Introduction:

We have shown that there are regions of focal denervation adjacent to normally innervated areas in the bladder wall of patients with detrusor instability (DI). This pattern is not found in normal bladder. Nerve growth factor (NGF) is important to maintain the autonomic innervation of many organs. Thus, the aims of this study were: 1) to compare the expression of NGF in control and DI patients

2) to compare the expression of NGF in areas of high and low nerve density.

Patients and Methods:

Bladder samples were obtained from patients with DI and patients with bladder cancer. NGF levels were measured using ELIZA. Sections were immunostained with S100, an antibody to myelin, to determine regions of high and low nerve density. Successive sections were stained with NGF to compare NGF expression and nerve density.

## Abstract Reproduction Form B-2

MH"Khadra, D Cleici, P Chambers', DE" Neal', 'JI' Gillespfe Author(s): Results: NGF was increased in tissues from patients with DI. In all patients with DI there were focal areas of denervation and these areas stained more densely for NGF. Conclusion: The localised differences in NGF expression observed immunocytochemically suggest that there may be complications in the interpretation of

measurements from whole tissue. Furthermore, the observations suggest that there is an increase in neurotrophic influences which may redress the denervation. It may be speculated that as NGF has been shown to be trophic for sympathetic nerves, it is involved in the selective stimulation of the regrowth inhibitory sympathetic fibres.