Chromogranin A (CgA) References

The following is a collection of reference materials about Chromogranin A. The links in this document are to abstracts, unless noted.

Chromogranin A, Neuron Specific Enolase, CEA, and Hydroxyindole Acetic Acid Evaluation in Patients with Neuroendocrine Tumors.

Bajetta E, et al.
Cancer 1999 Sep;86(5):858-65.

"There appears to be a direct correlation between tumor burden and serum CgA levels. Rising serum levels of CgA can precede radiographic evidence of recurrence. . . . .Using serum CgA level above 30 U/ml, one is able to discriminate between disease free patients and those with recurrent metastatic disease with a sensitivity of 92% and specificity of 96%. This is superior to measuring urinary 5-HIAA levels. . . ." Quote from "Recent advances in carcinoid pathogenesis, diagnosis and management" by Rose B.Gamin M.D. and Jeffrey A. Norton M.D. Surgical Oncology 9 (2000)173-179

Secretion of chromogranin A by peptide-producing endocrine neoplasms.

O'Connor DT, Deftos L

"We investigated the secretion of chromogranin A by peptide hormone-producing human tumors in studies of patients with the following neoplastic disorders: pheochromocytoma, parathyroid adenoma, primary parathyroid hyperplasia, medullary thyroid carcinoma, thyroidal C-cell hyperplasia, carcinoid tumor, oat-cell lung carcinoma, pancreatic islet-cell tumor, and aortic-body tumor. . . .The sensitivity and specificity of plasma chromogranin A elevations in the diagnosis of peptide-producing endocrine neoplasms were 81 and 100 percent, respectively. The elevation of plasma chromogranin A in our subjects suggests that their neoplasms co-release chromogranin A along with the usual resident hormone of the tumor, that these neoplasms could be characterized as 'chromograninomas,' and that measurement of plasma chromogranin A may be a useful diagnostic procedure in subjects with endocrine tumors, especially multiple endocrine neoplasia."

Chromogranin A: its role in endocrine function and as an endocrine marker and neuroendocrine tumor.

Deftos LJ

"CgA is of diagnostic value in classical endocrine tumors, in hormone-negative tumors, and in endocrine tumors in which other diagnostic procedures have their limitations. . . .CgA is an important new tool for the endocrinologist in the diagnosis and management of patients with endocrine and neuroendocrine tumors."

The ultimate biochemical diagnosis of gastro-enteropancreatic tumours.
Oberg K

Digestion 1996;57 Suppl 1:45-7

"In patients with midgut carcinoid tumours, chromogranin A is more sensitive than urinary 5-hydroxyindoleacetic acid but by combining these two biochemical markers most GEP tumours can be diagnosed. Chromogranin A is also a prognostic marker for survival in patients with midgut carcinoid tumours."

Plasma chromogranin A in prostatic carcinoma and neuroendocrine tumors.

Kimura N, Hoshi S, Takahashi M, Takeha S, Shizawa S, Nagura H

J Urol 1997 Feb;157(2):565-8

"Chromogranin A is an excellent marker for neuroendocrine tumors, particularly nonfunctioning tumors, and measurement of chromogranin A is also useful to detect prostatic carcinoma in patients whose prostate specific antigen is not elevated."

Chromogranin A in blood--a useful tumor marker

Syversen U, Heide LS, Waldum HL

Tidsskr Nor Laegeforen 1997 Oct 30;117(26):3810-1

"Chromogranin A in serum should be the first test used for detecting carcinoids. It is also useful for diagnosing other neuroendocrine tumours, such as oat-cell carcinoma of the lung, pheochromocytoma and neuroblastoma."

Chromogranin A: its clinical value as marker of neuroendocrine tumours.

Nobels FR, Kwekkeboom DJ, Bouillon R, Lamberts SW


"Neuroendocrine tumours for which no peptide marker is available usually retain the capacity to secrete CgA. CgA can thus be used as serum marker for these so-called 'non-functioning' endocrine tumours. Moreover, in patients with carcinoids and phaeochromocytomas, CgA is a more stable and thus more easily manageable marker than plasma levels of respectively serotonin and catecholamines and their urinary metabolites."

Usefulness of chromogranin A as a marker for detection of relapses of carcinoid tumours.

Pirker RA, Pont J, Pohnl R, Schutz W, Griesmacher A, Muller MM


"In our study that lasted over one year we could clearly show that the measurement of chromogranin A is impressively superior to 5-hydroxyindoleacetic-acid for detecting a relapse of carcinoids."
Usefulness of chromogranin A determination in the diagnosis of neuroendocrine neoplasia.

Militello C, Cannizzaro R, Pradella P, Volpin E et.al
Chir Ital 1999 Jan-Feb;51(1):45-51

"The high diagnostic accuracy of CgA sampling renders it very useful in early neoplastic detection, even in cases of nonfunctioning neoplasms or absence of liver metastases. In addition, CgA sampling may be an effective screening test in patients with irritable bowel syndrome or with liver or lung metastases when there is no evidence of the primitive (primary) tumor".

The biological characteristics of chromogranin A and its role as a circulating marker in neuroendocrine tumours.

Ferrari L, Seregni E, Bajetta E, Martinetti A, Bombardieri E
Anticancer REs. 1999 Jul-Aug; 19(4C):3415-27

"Because of the high sensitivity and specificity of CgA, this glycoprotein can be successfully used in diagnosis, prognosis and follow-up of NETs. CgA blood evaluation seems of particular interest in the management of the gastroenteropancreatic tract NETs and in carcinoids."

Tumour markers in neuroendocrine tumours.

Oberg K, Janson ET, Eriksson B
Digestion 2000;62 Suppl 1:33-8

"At the moment, chromogranin A is considered the best general neuroendocrine serum or plasma marker available both for diagnosis and therapeutic evaluation and is increased in 50-100% of patients with various neuroendocrine tumors. Chromogranin A serum or plasma levels reflect tumor load, and it may be an independent marker of prognosis in patients with midgut carcinoids.

Last modified: 2009

Source URL: http://www.carcinoid.org/content/chromogranin-cga-references