

Crescentic glomerulonephritis: a cohort of 32 years

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Introduction and objectives:

Crescentic glomerulonephritis (CGN) is a diagnostic and therapeutic emergency it is an entity of glomerulonephritis of various etiologies. The aim of our study is to review the etiologies and evolution of the CGN.

Methods:

This is a retrospective study (January 1985-July 2016) including 196 patients with CGN proved by renal biopsy in order to study the clinical, biological and histological profile as well as the therapeutic choices and to evaluate their impact on renal and vital prognosis.

Results:

The average age of our patients is 44.54 years (5 - 85 years), with a male predominance (107 M/ 89 W). Extra-renal signs were present in 79 cases (40.3%), including 2% renal pneumo syndrome. The clinical presentation was in 14.3% of cases a rapidly progressive GN. The ANCA was positive in 26.5%. Histology showed a CGN type: 1 in 2.6%, 2 in 32.7% and 3 in 50.5%. Fibrous crescents were described in 10.9%, Sclerotic glomeruli in 1.16 ± 3.26 on average, extensive tubulo interstitial fibrosis was observed in 46.8%. The therapeutic management required the use of emergency hemodialysis in 62%. 73.4% of patients received corticosteroids plus cyclophosphamide. Death occurred in 15.3% of patients, ESRF was observed in 48.5% and partial or total improvement of renal function was observed in 20.3% of cases.

Table N°I: the main causes of CGN

vascularits	26,5%
infection	9,6%
Primitive GN	8,6%
lupus	7,1%

Table N°II: the therapeutic management of CGN:

Hemodialysis	62%
Plasmapheresis	1%
Steroids	56%
Cyclophosphamide	51%
antibiotics	28%
Surgical intervention	3%

Discussion:

CGNs have various etiologies. Clinical examination, pathology and biological examinations help to establish the diagnosis and to determine the causes. Its treatment is an emergency to start: it is based on a high dose corticosteroid as well as alkylating agents associated with adjuvant treatment and hemodialysis if necessary. The development is conditioned by the degree of kidney injury and the importance of fibrosis and the number of glomerulus in sealing bread.

Conclusion:

A rapid etiologic diagnosis is necessary in order to avoid the installation of irreversible renal lesions and to allow an appropriate treatment.