Demography of Plasma Cell Dyscrasias in Egypt

Prof.Dr.HamdyAbdAlazim[1],MD,Prof.NeematKassem[2],MD,RihamAbdalreheem[3],MD,ShaimaaFarouk[1],MD,TarekYaqout[1],MD.*

Kasr Alaini School of Medicine, Cairo University , Egypt
(1) Department of Clinical oncology1, Cairo oncology centre Cairo Cure
(2) Department of Clinical Pathology; Section of Immunology
(3) Section of Hematology

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Background

Plasma cell dyscrasias (PCD) are a group of diseases characterized by the proliferation of a plasma cell clone which produces a monoclonal protein (M- protein).The most common type is Multiple Myeloma (MM) followed by Waldenstroms macroglobulinaemia (WM) and Light chain disease (LCD). Hypocalcaemia, anemia, renal damage, increased susceptibility to bacterial & fungal infections, and impaired production of normal Immunoglobulins as well as diffuse osteoporosis are common clinical manifestations of MM (**Grethlein S, medicine; MM; 2004**).Thus, plasma cell dyscrasias present in different fields of clinical practice, making it of great interest to study the epidemiology of this disease.

Aim

In the present study, we described the epidemiological aspect of PCD presenting to our oncology unit of Cairo university hospitals during seven years period of time.

Patients and Methods

We retrospectively reviewed the medical records of **204** patients diagnosed with MM, WM and LCD in our unit from January 2002 through March 2009.One Hundred and Twenty Five out of **204** are Males and 67 are Females, with a mean age 45years (range 28-70).

Results

The study included **204** newly diagnosed and untreated PCD patients, 182 were affected by MM (89.2%), 9 by LCD (4.4%) and 13 by WM (6.4%). IgG myeloma was diagnosed in 133 (73.1%) patients, IgA myeloma in 49 (26.9%).K light chain in urine was found in 139 (68.1%) patients and λ in 65 (31.9%) .The International Staging System (ISS) using B2 micro globulin and albumin as staging parameters was applied to classify 115 patients out of 204; accordingly 41 patients were found to be in stage I, 71 in stage II and 3 in stage III.

Conclusion

This descriptive study enabled us to identify the pattern of distribution of different PCD referred to our unit, drawing our attention to the increased incidence in females & to the younger age at presentation (down to 28 and 32 years old). Further collaborative studies in association with other institutions will help establish the Egyptian configuration of PCD needed for prospective individualization of therapeutic guidelines.