

## Toward establishing a renal biopsy registry: A step in the right direction

Renal biopsy has become an indispensable tool in the investigation of medical diseases of the kidney. The spectrum of diseases found on percutaneous renal biopsies varies greatly depending on multiple factors such as age, gender, race, geographical location, and the nature of biopsy indications.<sup>[1]</sup> Moreover, there is evidence of change in many parts of the world in the spectrum of renal diseases during the recent past.<sup>[2]</sup> It is therefore imperative to accurately document the spectrum of renal diseases prevalent in a particular area over a particular period of time. Many developed countries have established national renal biopsy registries to document such variations and changing trends in the disease spectrum.<sup>[1]</sup> However, such registries are largely lacking or are in primitive shape in most of the developing countries. This gap is partially filled by single or multicenter data on renal biopsies in some of these countries. Although these are not ideal, hospital or center-based biopsy studies do shed some light on the spectrum of the prevalent renal diseases in that particular location.<sup>[3-5]</sup>

The study by Golay *et al.*, represents such an attempt.<sup>[6]</sup> It comes from a large tertiary care referral center from Eastern India. The study period spans 2 years, which is not long enough to document changes in the spectrum as concluded by the authors. The sample size is fairly large. All the biopsies were studied by the same pathologist, which ensures uniformity in the diagnosis and categorization of renal diseases. Biopsy indications are more or less similar to those reported in other regional studies.<sup>[3-5]</sup> The study population is, however, heterogeneous with respect to age of the patients. The authors included children, adults, and elderly in their analysis, which has somewhat biased their results. A separate analysis of these age groups would have been more informative. This also makes direct comparisons with some other studies rather difficult. For example,

the study from Pakistan was conducted on adult patients only.<sup>[5]</sup> The authors have also included both primary and secondary glomerular diseases in their analysis.

The authors have correlated the histopathological lesions of glomerular diseases observed on renal biopsies with different clinical and demographic features of the patients. This is in keeping with the well-known fact that diagnostic renal pathology requires a correlative approach for arriving at an accurate diagnosis, especially in situations where fuller pathological evaluation of renal biopsies by immunofluorescence (IF) and electron microscopy (EM) is not readily available. The study shares the biopsy indications with other regional studies. Most notably, asymptomatic urinary abnormalities (AUA) represent a small proportion of the biopsy indications. This has obvious implications for the differences in the spectrum of various glomerular diseases observed in these studies.<sup>[3-5]</sup> One common finding in all these studies is the relatively low prevalence of IgA nephropathy (IgAN), although it is considered the most common primary glomerular disease worldwide. This is understandable given the rarity of AUA as biopsy indication in these studies.<sup>[5]</sup> Another interesting finding in the study, which is also shared by other recent studies from the region, is that focal segmental glomerulosclerosis (FSGS) has become the commonest cause of nephrotic syndrome (NS), especially in adults during the recent years.<sup>[4,5]</sup> The authors have also classified FSGS into histological variants. Their distribution of the variants is more or less similar to that found in another Indian study.<sup>[7]</sup> Collapsing FSGS (cFSGS) has very low prevalence in both studies. However, its prevalence is comparatively higher in a study from neighboring Pakistan.<sup>[8]</sup> The prevalence of non-IgA mesangial proliferative glomerulonephritis (non-IgA MesPGN) is very low in the study. It may be mentioned here that this lesion is a diagnosis of exclusion and with better evaluation tools, its prevalence in the biopsy series should decline, as in the study under discussion. A very low prevalence of amyloidosis is somewhat difficult to understand. The authors have put forth some explanations for this very low prevalence, but it must be acknowledged that tuberculosis is also endemic in India.

The authors acknowledge certain limitations of the

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study. These include the relatively short duration of the study, its origin from a single center, and use of EM in only a minority of cases. These are understandable given the origin of the study from a developing country. Despite the above shortcomings and limitations in the study, the authors merit commendation for documenting the spectrum of glomerular diseases from Eastern India. The study will provide an impetus for setting up regional or national renal biopsy registries in the country for an accurate documentation of the prevalent renal diseases and the changing trends over time.

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