EDITORIAL

Hepatitis C: Present Status and Management

Hepatitis C virus (HCV), being discovered in 1989, emerged as one of the common incurable etiologies of chronic liver disease until 2014 when introduction of direct acting anti-viral (DAA) drugs have changed the scenario to a curable disease in only 25 years.

Because of under-diagnosis, under-reporting and a lack of systematic surveillance in most countries, the exact prevalence of HCV is difficult to assess. World Health Organization (WHO) in 2022 estimated that approximately 58 million people had chronic HCV infection and approximately 1.5 million new infections occurred each year with highest prevalence being in Eastern Mediterranean (12 M) and European region (12 M). In Bangladesh, nation-wide survey on HCV was not done. However, a study conducted in a semi-urban location in the outskirts of Dhaka showed the prevalence of hepatitis C as 0.88%.

HCV is transmitted mainly through persons who inject drug (PWID), providing health-care (blood transfusion, organ transplantation and breaches in infection control protocols) and sexual activities, mainly male homosexuality (MSM). Other procedures or behaviors associated with exposure to blood, such as procedures involved in folk medicine (e.g. scarification, cupping), tattooing, body piercing and commercial barbering, may also transmit HCV on rare occasions. Detectable HCV-RNA in nasal and rectal fluid in patients with high viral load are also the potential sources of HCV transmission.

HCV is a hepatotropic RNA-virus and is responsible for a wide range of hepatic pathologies including acute hepatitis, chronic hepatitis including cirrhosis, hepatocellular carcinoma and hepatic failure. Few extra-hepatic diseases/conditions are also have been established to have strong relation with HCV; they are cryoglobulinemia, autoimmune disorders (including autoantibodies and sicca syndrome), porphyria cutanea tarda and lichen planus. A strong and likely causal association between chronic HCV infection and glomerular disease mainly mixed cryoglobulinemia, membranoproliferative glomerulonephritis (MPGN), membranous nephropathy and polyarteritis nodosa (PAN) have also been documented.

To eliminate HCV, WHO have taken a strategic initiative in 2014, which aims to get rid of this infection as a public health threat until the year 2030 which includes reduction of HCV incidence by 80%, diagnosis of HCV infected people by 90%, providing treatment to 80% of eligible candidates and reduction of liver related death by 65%. After a few years of introduction of DAAs, reduction in HCV-associated morbidity and mortality are observed.

Although the DAA regimens are highly effective, only 9/45 countries are at present on track to achieve the WHO goals. So, it is supposed that, the WHO target will not be met by the majority of high-income countries within the next decade. So, eight key factors for HCV elimination has been proposed, which include political will, finance a national program, implement harm-reduction programs, expand treatment capacities beyond specialists, remove treatment restrictions, implement monitoring and evaluation, screening and awareness and linkage to care. The three most important elements of this strategy, political will, removal of treatment restrictions and monitoring and evaluation of existing programs are proved to accompany prevention and harm reduction.

With currently available DAAs, treatment of HCV with potential genetic variability is overcome by combination of relatively newer molecules, such as sofosbuvir/velpatasvir, glecaprevir/pibrentasvir and also with sofosbuvir/daclatasvir. Ribavirin is only used when it looms superior to other combinations to cure infection and side effects profile. Patients with renal disease and HCV infection warrant special protocol to follow. In indicated cases of hepatic diseases, treatment may safely be given to patients of chronic kidney disease with as low eGFR as <30 mL/min per 1.73 m^2 or on dialysis. Specific glomerular diseases associated with HCV in absence of comorbidities, treatment to be started after one to four weeks of immunosuppressive therapy. Treatment of kidney transplant waiting patients infected

with HCV is a concern of major management decision and should not be deferred on availability of donor and absence of comorbidities.

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