EDITORIAL

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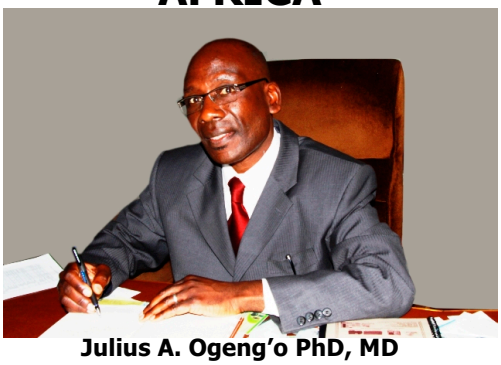
GALLSTONE DISEASE: A CALL TO AWARENESS IN SUBSAHARAN AFRICA



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Gallstone disease (GSD) is a major global health problem that causes high morbidity and mortality constituting a significant economic burden in developed countries (Shaffer, 2006; Stinton and Shaffer, 2012; Njeze, 2013). It was previously considered rare in sub-Saharan Africa (Stinton and Shaffer, 2012; Njeze, 2013). Its prevalence, however, is steadily rising and has already attained considerable proportions in a number of countries perhaps consequent to epidemiological and demographic transitions (Eze et al., 2016). This condition is important for several reasons – First, it is one of the most common causes of upper gastrointestinal morbidity and may mimic / be associated with gastritis, peptic ulcer disease, hiatal hernia, esophagitis, gastroesophageal reflux disease, duodenitis; acute and chronic pancreatitis, hepatitis and portal vein thrombosis among others (Sabitha et al., 2016). Secondly, it is a predisposing / risk factor for overall mortality and other diseases including various gastrointestinal cancers, non-alcoholic fatty liver disease; cardiovascular diseases (CVD) especially coronary heart, cerebrovascular, peripheral vascular diseases, arterial stiffness and heart failure (Yu et al., 2017). The risk for CVD is independent of age, gender and other comorbidities (Olaiya et al., 2013). Thirdly, patients with GSD appear to have a higher prevalence of cardiovascular risk factors such as obesity, type 2 diabetes mellitus; dyslipidemia, hyperinsulinemia, sedentary life style and gut microbiota dysbiosis (Lv et al., 2015).

There is reason for fearing potential escalation of this disease in SSA, and hence the call for awareness – Conventional and morphometric risk factors abound. The major risk factors include non-modifiable features like female gender, age, family history and genetics , geography and ethnicity; and modifiable ones like high calorie diet, dyslipidemia, diabetes mellitus, metabolic syndrome, obesity, total parenteral nutrition, rapid weight loss, drugs like thiazide diuretics, antibiotics like ceftriaxone; sickle cell disease, spinal cord injury, cystic fibrosis, Crohn's disease, liver disease and poor socioeconomic status (Stinton and Shaffer 2012; Parambil et al., 2017; Acalovschi, 2017). Among these, the key ones highly prevalent in Kenya and other SSA countries include, but are not limited to, metabolic syndrome (Kaduka et al., 2012), diabetes mellitus (Ayah et al., 2013), high calorie diet (Kigaru et al., 2015), overweight and obesity (Gichu et al., 2016). The prevalence of these conditions suggests that gall stone disease is likely to be rampant in Kenya.

Turning now to gall bladder morphometry, the article by Kariuki et al. (2017) in this issue of Anat J Afr reports a mean gall bladder volume (GBV) of 48cm^3 which is way beyond 20 – 30 cm^3 in contemporary literature reports (Sari et al., 2003; Adeyekun and Ukadike, 2013; Dey et al., 2016; Idris et al., 2016; Ewunomu, 2017). The variation with age is consistent with other reports (Idris et al., 2016; Yaylak, 2016) and appears in tandem with age related increase in prevalence of gall stone disease especially after 40 years (Idris et al., 2013). Secondly, GBV increases in conditions such as diabetes mellitus, obesity and dyslipidemia (Ugbaja et al., 2015). Gall bladder volume is important in functional and clinical evaluation of the gall bladder. It affects its baseline contraction index (Ugwu and Agwu, 2010), motility and post prandial emptying. It may, therefore influence the pathophysiological mechanisms of gall stone formation, presentation and mode of management. Accordingly, dilated gall bladders constitute high risk for gall stone formation (Huang et al., 2010). In this regard, assessment of its size may also constitute an important diagnostic screening tool for various disorders (Idris et al., 2016). Taken together, the interplay of non-modifiable, controllable and morphometric risk factors for GSD may conspire to drive

the condition towards epidemic proportions. Proactive action must therefore be taken to curtail the imminent rise of this disease, already epidemic in some regions of the world.

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