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Introduction

is study described the burden of acute leukaemias and the level of current diagnostic competence of acute leukaemias in this institution with the view to attract attention to facility upgrade and better survival of acute leukaemia cases in this institution.

Acute leukaemia; comprising Acute myeloblastic leukaemia (AML) and Acute lymphoblastic leukaemia (ALL), represents a clonal, malignant transformation of blood forming cells that arise from the bone marrow or the lymphoid organs, and which are o en associated with fundamental genetic abnormalities. Acute leukaemias are characterized by persistent proliferation of haemopoietic progenitor cells in maturation arrest at a particular stage of development which is speci c for each subtype of the leukaemia. e visible indicator of malignant transformation is associated chromosomal abnormalities which are also of clinical relevance. In view of the maturation arrest of precursor lymphoid or myeloid lineage, there is drastic reduction or absence of matured forms of a ected lineage but undue proliferation and accumulation of the arrested progenitor cell. ese aberrant cells, believed to have reduced apoptosis, overwhelm normal haemopoiesis, spill over into circulation and in ltrate organs and tissues. e clinical course is rapid and outcome is fatal, within three months, if untreated. Acute leukaemia represents a signi cant proportion of haematological malignancies worldwide.

is index retrospective study builds on previous publications

(68%) males and sixteen (32%) females (M:F=2.1:1). Twenty eight (56%) were diagnosed as AML while twenty two (44%) were diagnosed as ALL cases. Table 1 showed the sex distribution of both AML and ALL cases. e male female ratio was 2.1:1 for each type. Table 2 and gure 1 showed the frequency distribution of the various subtypes of acute leukaemias. e gure indicates that an average of 5-6 acute leukaemia cases was managed per annum.

As shown in table 2, eighteen (36%) of the acute leukaemias were of age 10 years and only one (2%) was within age bracket 41-50 years. However, unlike ALL, AML peaks at age brackets 31-4m years and at >50 years.

Figure 2 indicates that AML subtypes (M_0 (Maught), M_5 and M_7 were not diagnosed. And ve (unclassi ed) cases (10%) of Acute leukaemia cases would have bene ted from advanced studies like ow cytometry for con rmation of diagnosis. Most commonly diagnosed was M_2 followed by M_4.

Figure 3 showed that 68% of ALL were diagnosed as L2-subtype during the period and only 9% were diagnosed as L3 i.e. (L2>L1>L3).

During the study period, cytochemical stains were not available for routine use and hence further de nition of diagnosis using cytochemistry was not done.

Discussion

Acute leukaemia arises from a genetically abnormal lymphoid/ myeloid precursor cell that is arrested at a particular stage of maturation, generates an abnormal clone within the marrow which rapidly overpopulates the marrow, spread to peripheral blood and in ltrates tissues and organs. erefore, acute leukaemias present as bone marrow failure due to the very heavy marrow in ltration by the abnormal clone of blast cells with resultant very minimal residual normal marrow.

	ALL	AML	Total
Number (n)	28	22	50
M:F	2:1	2:1	2.1:1
Mean Age	19 yrs		

e main goal of diagnostic modalities vis-à-vis morphology, cytochemistry, cytogenetics and immunophenotyping (antigen assessment using monoclonal antibodies) is able
within one of the bone marrow cells and to be able to predict prognosis. During morphology was
and very occasionally complimented with cytochemistry.

Acute leukaemia a ects all age groups and all races; this study align with previous studies [10] indicating a rising incidence of acute leukaemias in this catchment area of Nigeria. However, there are now at least four new Teaching Hospitals (120 km proximity) around this center and still this population of acute leukaemia was recorded within 5 years.

e incidence of acute Leukaemia varies geographically, but is usually 20-30 million per year [11]. In this index study, we found a yearly frequency rate of 6-16 Acute Leukaemias per year (Figure 1) and like the earlier reports [10], male: female ratio of 2.1:1.

In the past, the prognosis was universally bad, with deaths in a view