



SDI Review Form 1.6

Journal Name:	<u>International Journal of Biochemistry Research & Review</u>
Manuscript Number:	Ms_IJBcRR_32782
Title of the Manuscript:	Diagnostic utility of chitotriosidase versus total acid phosphatase activity, ferritin and globulin in screening for Gaucher disease
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1. Aims: - In predicting GD in paediatric patients 2. Introduction: - Consider mentioning lysosomal storage disorder - Consider writing GBA in italics - Consider mentioning the reason for changes in Ferritin levels and Acid Phosphatase levels in GD – even if it is hypothesised (the authors have mentioned the reasons for change in ChT and Globulin levels). Also consider mentioning the rationale of using A/G as a marker mentioned later. 3. Materials and Methods: - Group B(20 pediatric patients have the inclusion criteria of Gaucher disease) – please clarify if it is inclusion criteria of GD or suspected GD or suspected storage disorder or suspected haematological disorder. - They were recruited Declaration of Helsinki.(consider breaking long sentences into shorter more comprehensive ones – restructuring advised) - were taken already from the file of the patients (please clarify why were these values recorded from previous records? And how old were these values from the date of inclusion ?) (if the values were old enough can it be justified to compare old values with newly investigated parameters, if so, why and how) - For all laboratory methods consider following an order of description: The test done, the method	It is ok No literature could be traced regarding the exact mechanism of for changes in Ferritin levels and Acid Phosphatase levels in GD rather than an association. They have suspected storage disorders These tests are routinely done to such children and so they taken from the records and i take the most recent data to the study, for example GD patients may have the diagnosis since three years , but they do follow up check by routine investigations including these lab. Parameters and i take the most recent records. I rearrange the laboratory methods as required.



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	used, the protocol of the test, the equipment/ instrument used – provider / manufacturer and the same order be consistently followed throughout the text for all the tests done^s 4. Results: - consider representing the data mentioned regarding the Group B in diagrammatic form - have ~~nonneuropathic~~ non-neuronopathic type 1 GD - What method was used to classify the children as having GD – 1 and GD – 3, please specify - [Comparison between group A , B and C group A versus B (P-value <0.05)]: consider placing this paragraph before Table 1 - Figure 2 picture 4: child in sky blue clothes. Consider obscuring the identity of this child - Table 3 and associated content to be placed before Figure 3 and it's associated content - Table 3 : mention how the cut off values were determined or if adopted from other studies consider citing them 5. Discussion: - Consider mentioning the incidence of GD in your study and in your area. Any specific reason for higher incidence in your area please mention	Classification of the GD into type I and III is a clinical classification depending on if there were neurological affection or not. No previous studies could be traced in literature regarding the cut-off values of the measured parameters, although they frequently measured.
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Minor REVISION comments	1. Methodology - A cross sectional case control study was carried out on 49 pediatric patients (29 GD patients and 20 patients suspected to have GD), and in addition to 20 healthy, age and sex matched controls were selected. - Complete blood counts and liver function tests and plasma protein electrophoresis were routinely done for all the patients in all the studied groups. - ELISA assays of plasma ChT.... amplification were done.(consider writing shorter sentences) <u>2. Results:</u> - Significantly higher plasma ChT and total acid phosphatase in was observed in GD patients versus the suspected GD patients (P-value <0.05). Both markers have ~~the highest~~ higher AUC, sensitivity and specificity. <u>3. Introduction</u> - Among these molecules are chitotriosidase, acid phosphatase and ferritin - Research on various biochemical markers of Gaucher disease will provide an insight into the pathophysiology - either single or in combination ~~with another~~ - before ~~making~~ (doing / performing) mutation analysis. <u>4. Materials and Methods</u> - The present study is a cross sectional case control study, ~~was~~ carried out on 49 pediatric patients divided into two groups - in addition to 20 apparently healthy children, age and sex matched were selected as control group - inpatients pediatric departments - If the journal follows British system then Paediatrics - which are ~~of~~ the major tertiary referral pediatric - every subject and his/her parents were informed about the aim of the study and ~~gave~~ a written consent was obtained	i do all the required corrections as much as i can and really i get large benefit from the peer review process . Thank you
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	- The study was carried out ~~during the~~ over a period of ____ months from January 2015 to May 2016 'or' The study was carried out during ~~the period from~~ January 2015 to May 2016. - liver enzymes (ALT and AST) – Please expand - § - Plasma ChT was measured by enzyme-linked immune-sorbent assay (ELISA) following manufacturer protocol using reagents supplied by Elabscience Biotechnology Co. (Beijing, Catalog No: E-EL-H5620) and conducted and read with commercially available assay kits using ELISA multiskan EX microplatephotomter, thermo scientific (STAT FAX-2100, USA) <u>5. Results:</u> - second allele were was not detected ~~was occurred~~ in 7.7% - Typesetting Table 1 to ensure proper placement of * - FIGURE 3: Combined ROC (expand) curve <u>6. Discussion</u> ChT gene in italics - group B ~~were was~~ demonstrated by comparing - high plasma ChT and ferritin have ~~the highest~~ higher sensitivity, while high total acid phosphatase activity, and globulin and low A/G ratio have ~~the highest~~ higher specificity in diagnosing GD - plasma ChT and total acid phosphatase activity are ~~the best~~ better screening markers that could be used for predicting GD patients - Hassan et al. [14] confirmed in their study that plasma ChT, total acid phosphatase activity, ferritin and globulin were collectively helpful biomarkers in evaluation and follow up (prognosis) of the effect of enzyme replacement therapy in GD patients. - The findings of the present study proved that plasma ChT, total acid	
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	phosphatase activity were the most (? Sensitive, specific, valid accurate) of the studied biomarkers that could be reliable in screening for GD. - may have multiple etiologies, but not been assessed in the present study. - In agreement with these findings is a study done by Arıkan-Ayyıldız et al.[16] on pediatric patients with GD / in which it was found that hyperimmunoglobulinemia was present in 77% at diagnosis / which reported hyperimmunoglobulinemia in 77% of children. - lyso-Gb1 biomarkers (expand) - Further studies comparing...are recommended. (consider writing smaller sentences) <u>7. References:</u> Reconsider References 4, 7, 10, 12 and 15 to match Vancouver style	
<u>Optional/General</u> comments	1. Reviewing by an English language specialist / native English speaker recommended. 2. Some sentences are long which need to be rewritten as short sentences for the ease of comprehensibility 3. Some sentences have been written as phrases and need to be restructured as sentences 4. Laboratory protocols to be written in a comprehensible manner using a standard method of protocol description which is suggested to be followed throughout the text with consistency. 5. Idea of the study is novel and appreciable 6. Outcomes of the study could be potentially powerful 7. Kindly consider numbering the lines so that it becomes easy to review. 8. Consider renaming the title . In Figure 2, one of the patient's face is recognisable. Kindly see to it that it that the identity is masked	All the required data has been done. I change the title It is partial side view that not really recognize the patient.