patients with chikungunya fever compared to dengue fever [4]. Differentiating chikungunya with dengue fever is important as the former is a self-limiting acute illness whereas the latter has dreaded systemic complications. In view of relative well-being of a child, positive dengue IgM, negative serology for chikungunya, and normal arthrocentesis study, the diagnosis of dengue arthritis was made.

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Unusual Foreign body "Live Fish"

Incidence of foreign bodies' (FB) ingestion is usually greatest in children aged 6 months to 6 years [1]. The spectrum of presentation varies widely from sudden death due to respiratory obstruction to accidental finding during routine investigation. Occasionally, we also find younger children may be "fed" foreign bodies by older children [2].

A 6-month-old male infant was brought to our emergency room by parents with sudden onset of difficulty in breathing. Further history revealed accidental self ingestion of whole live fish given in baby's hand by his elder sibling while cleaning the aquarium at home. Incidentally this was witnessed by the father. On examination, baby was afebrile, cyanosed with increased breathing efforts and saturation was 76%. General physical examination was normal. On systemic examination, there was bradycardia and bilateral air entry was absent. Within a minute, baby developed labored breathing. Immediately baby was taken for intubation. While passing laryngoscope for intubation, we noticed pooling of blood in the oral cavity. After suctioning, the tail part of the fish was visible in the throat. The fish was removed with help of Magill forceps with gentle manipulation. Chest movements improved with good air entry on auscultation. Post-removal, vitals were stable. Baby maintained saturation without oxygen. Chest *X*-ray was taken to rule out aspiration. Antibiotics were started and supportive care continued. Baby was observed for 24 hrs in intensive care unit and discharged on third day on stable vitals; follow-up after a week was uneventful. Fish was 6.5 cm in length and 3 cm in breadth, and blood stained.

The enhanced risk of aspiration in this age group is attributed to inherent anatomic and physiologic characteristics like inadequately developed posterior dentition, immature neuromuscular mechanisms of deglutition, airway protection and the ubiquitous tendency of putting objects into the mouth. An unattended vulnerable child and easy access to small objects are also contributory [1,3].The majority of ingested foreign bodies will pass spontaneously [4]. Walvekar, *et al*. reported one case of accidental ingestion of live fish in infant, where it was 'bathini fish medicine' used for treatment of asthma [5].

Keeping aquariums at home has become a trend in modern lifestyle. Usually children are interested to watch, touch and play with this kind of live objects. This unusual case emphasizes the importance of caregivers' special attention to this vulnerable age group and also importance of timely diagnosis and intervention.

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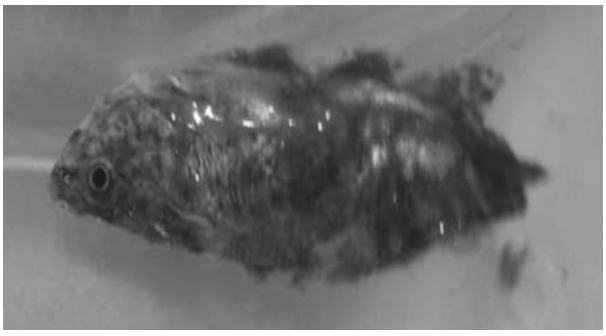

FIG.1 *Blood-stained fish immediately after removal.*

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Ringer's Lactate or Normal Saline for Children with Severe Dehydration: Change-from-baseline Analysis *vs* 'Conventional' ANCOVA

We read with interest the results of the randomized trial on Ringer's lactate (RL) *vs* normal saline in children with acute diarrhea and severe dehydration [1]. The study authors had used a rigorous methodology to address a pertinent question, and found no difference in the outcomes between the two groups. We wish to highlight a few methodological issues, which, if addressed, could have further improved the quality of the study:

The authors mention that the primary outcome variable was 'change in pH from baseline'. However, they possibly used the difference in *post-intervention* pH between the groups and not the magnitude of 'change from baseline' for calculating the sample size. There is no mention of the mean or SD of the change in pH from baseline in the study from which the authors estimated the sample size. The sample size could have been very different if the standard deviation of this outcome was large (or small!) from the one used in the sample size calculation.

At least four different approaches can be employed to analyze a continuous outcome that is measured at two time points (*i.e.* baseline and after treatment) in a RCT: post-treatment, change between baseline and post-treatment, percentage change between baseline and post-treatment, and analysis of covariance (ANCOVA) with baseline value as a covariate [2]. The authors chose to use a slightly different approach using the change from baseline as the outcome but used ANCOVA to adjust for a few covariates other than the baseline pH. Compared to the change from baseline analysis, ANCOVA with baseline as the covariate has higher statistical power, particularly if correlation coefficient between baseline and follow-up values is <0.8 [2,3]. More importantly, the latter analysis has the advantage of being unaffected by baseline differences between the groups (it adjusts each patient's follow up score for his/her baseline score) [3]. In contrast, the change from baseline analysis takes the pretest difference too seriously and might produce biased results in the presence of imbalance in baseline scores between the two groups [4]. Though not statistically significant, the baseline pH was higher in the RL group [1].

Instead of providing only the *P* value, the authors should have provided the results of the 'ANCOVA' model in a more detailed way - Vickers, *et al.* [3] have provided an excellent model for depicting the results of the analysis using ANCOVA model (albeit, with baseline as covariate). The unadjusted and adjusted mean difference of change from baseline along with 95% CI would have given the readers some idea about the precision of the results and the magnitude of confounding caused by the two covariates.

The term 'repeated measures' usually implies that the analysis involved an interaction term, i.e. 'group*time' in the model. It is not clear if the *P* value mentioned in the study refers to the *P* value of this interaction term.

The authors adjusted only for baseline serum sodium and chloride - the two factors found to be significant on bivariate analysis - in the ANCOVA model. Many researchers have effectively demonstrated the inappropriateness of this approach, *i.e.* adjustment for only 'significant' variables [5]. Moreover, the clinical relevance of adjusting for serum chloride when baseline serum pH had already been accounted for in the change from baseline analysis is not clear. The better approach would be to use pre-specified ANCOVA where a few *a priori* selected important baseline variables are used as covariates [6]. An important variable that had to be adjusted was the time interval between the baseline and the time to achieve primary end point, as the latter was not fixed in the two groups. Not including it in the model because of lack of significant result is not valid as the