Sir,

With regard to the short communication by Bharati S et al. published in your journal (Volume 56, Issue 2, April-June 2012) about the effect of the lunar cycle on frequency of births,1 we have to mention that the same myth exists in Peru. Some people, physicians and nurses, particularly who live in rural areas believe in the influence of the lunar position on the distribution of deliveries; especially it is thought that the frequency of births increases during the full moon. Therefore, we performed a research for proving the veracity of this myth.

In this retrospective and observational study, we examined 1836 births (995 vaginal births and 841 Cesarean sections) at the Obstetric and Gynecologic ward of a teaching hospital, covering 8 lunar months. We considered all births (vaginal deliveries and Cesarean sections), independently of doing induction or not; however, it must be taken in account that in this hospital most of Cesarean sections are non-elective. Five groups were formed from the entire lunar cycle. Four of the groups were related to the phases of the moon (new moon, mid-ascending lunar phase, full moon, and mid-descending lunar phase); the fifth group was based on the other days that were not considered previously. Then, we performed a Kruskal — Wallis one-way analysis of variance for comparing the number of vaginal deliveries, Cesarean sections, and total number of births between these five groups. A significant level of 0.05 was employed for all tests. We used, as statistical software, SPSS v20.0.

In all the cases, no significant difference was found (for comparing the number of vaginal births: $P = 0.955$, $>0.05$; for comparing the number of Cesarean sections: $P = 0.800$, $>0.05$; for comparing the total number of births: $P = 0.829$, $>0.05$). Thus, we concluded that it seems there is not enough evidence to affirm that a relationship between the lunar cycle and frequency of births really exists.

Previous studies have shown similar results; for instance, Bharati S et al. examined 9890 full-term spontaneous deliveries as well as non-elective Cesarean sections, they found no significant differences and failed to prove that exists a relationship between lunar cycle and frequency of births.1 In the same way, Staboulidou I et al. analyzed 6725 deliveries and obtained similar results.2 Other researchers studied a major number of deliveries, for example, Arliss JM et al. performed an analysis of 564,039 births and despite the large sample that was examined, the data demonstrated no influence of the lunar cycle on deliveries.3 However, not all studies have negative results; Ghiandoni G et al. found an effect of lunar phases on the data of delivery, especially in the case of multiparae and plurigravidae.4

In conclusion, this is a topic which involves a lot of controversy; therefore, additional research is needed. However, we consider that future studies must be designed according to the myth instead of focusing on large samples. For us, it is possible that the myth is being misinterpreted.

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References


Sir,

Rickettsiosis is an underdiagnosed group of diseases presenting as acute febrile illness, with high mortality in untreated cases; the reported seropositivity in clinically suspected infections is up to 33%. Many cases have been reported from Maharashtra, Karnataka, Tamilnadu, Kerala, Jammu and Kashmir, Himachal Pradesh, Uttaranchal, Rajasthan, West Bengal, and Assam.1-3 Widespread existence of the infection is suspected; however, only a few reports are available that provide a fragmented and incomplete picture. There is a need to undertake studies wherever possible to understand the Indian scenario in a better perspective.

Tests available to diagnose rickettsiosis are culture, serology including immunofluorescence, and molecular tests. Except serology, other tests are beyond the reach of most diagnostic laboratories.4 Serological tests like Weil–Felix test (WFT), latex agglutination, indirect hemagglutination, immunoperoxidase assay, ELISA, and the ‘gold standard’ microimmunofluorescence are used in laboratory evaluation of suspected rickettsial infections. Because of logistics and other constraints, WFT proves to be a handy and affordable for the peripheral areas5; moreover, it enables the laboratory physician to interpret the results in terms of titer for diagnosis and prognosis of the infection.

The present work was undertaken at SDM College of Medical Sciences and Hospital, Dharwad, Karnataka. The principal intention was to ascertain presence of rickettsial infections in this area using WFT and correlation of test results with clinical diagnosis and treatment outcome.

A total of 380 samples from clinically suspected rickettsial infections were subjected to WFT from March 2011 to April 2012. Serum samples, positive on screening by slide agglutination, were tested by tube agglutination. WFT was performed and interpreted as per manufacturer’s instructions [PROGEN, Tulip Diagnostics, Goa]. Titers of more than 1:160 for OX-K and more than 1:80 for OX-2 and OX-19 were considered significant. The demonstration of a fourfold rise in titer was not possible in our study.

Forty-six samples were positive by WFT, with significant titers [Table 1]. Adult males were the commonly affected group (22/46). Prominent clinical features of WFT-positive cases included fever (100%), headache (34%), pain abdomen (28%), and rashes (15%). Such non-specific presentations make diagnosis difficult, thus endorsing the need for laboratory evidence.1

Rickettsiosis has been documented in southern India and must be considered in acute febrile illness.6 WFT-positivity of 12% among suspected cases warrants concern. Of the 46 seropositive cases, 17 were finally diagnosed by the [Table 1].

<table>
<thead>
<tr>
<th>Antigen Only</th>
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<tr>
<td>OX-K</td>
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<tr>
<td>OX-K and OX-2 and OX-1</td>
<td>9</td>
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</tbody>
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Total WFT-positive samples 46

*Total samples showing significant titers either alone or along with other antigens


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