were consistent with the diagnosis of Kimura disease.

After a extensive literature search [2-4] and detailed discussion with parents, we commenced a combination of oral cetirizine (0.29 mg/kg/day) and oral montelukast (0.58 mg/kg/day). We witnessed a rapid and sustained clinical response.

Kimura disease usually has an indolent course. The etiology remains unclear, although eosinophilia, increased IgE, tumor necrosis factor (TNF-α), interleukin (IL)-4, IL-5, IL-13 and mast cells are seen in the peripheral blood and tissue, leading to autoimmunity, allergy, neoplasm and parasite infestation being proposed as possible risk factors [5]. In localized disease, surgery is the mainstay of therapy. Regional or systemic corticosteroid therapy, immunosuppressive agents and radiation have been used [1]. Recurrences after surgery or on discontinuing steroid treatment are common [1]. Other agents tried with variable outcomes are oxpentifylline, cryotherapy, vinblastin, all-trans-retinoic acid and Imatinib [5].

Cetirizine, a selective histamine H1 receptor blocker is known for its antihistaminic and anti-inflammatory properties. It inhibits eosinophil chemotaxis, adhesion to endothelial cells, suppresses the generation of various proinflammatory cytokines and decreases intercellular adhesion molecule 1 expression [2]. Pranlukast and montelukast are leukotriene receptor antagonists known for their anti-inflammatory role [3]. Almost all the previous reports on these two drugs were in middle aged adult patients with Kimura disease, reflecting the disease demography, with little data on use of these safer drugs in children [3].

Due to financial constraints and poor access to health care resources, the patient was started on drug combination of montelukast and cetirizine, which were considered safe, affordable, easily available, orally administered and not needing any specific monitoring for side effects. After remission, we omitted montelukast first because we believed that cetirizine has a better safety profile for long term use.

Thus, while earlier reports suggest variable effect of cetirizine and montelukast in this disease, the dramatic response to these drugs suggests that inhibition of eosinophil recruitment and activity may be an important aspect in the treatment of Kimura disease.

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Beyond Hospital Boundary: A Novel Game-Changer Tool of Kayakalp for Community Participation in Sanitation, Hygiene, and Infection-control

Kayakalp initiative was launched in 2015 to promote cleanliness, hygiene, and infection control practices in public health facilities in India [1]. This innovative tool alongwith its annual incentives has the potential to make impactful behavior change amongst health caregivers eventually leading to desired transformation [2]. It has a standardized protocol and scoring pattern on given parameters under different sections for quality assessment, first by internal evaluation, then peer and final validation by an external assessment [3].

From 2018 onwards, a new section 'Beyond hospital boundary' has been added to this checklist. The name itself indicates the assessment of surroundings for sanitation and other parameters of Kayakalp. The ten sub-sections added are: promotion of *swachta* (cleanliness) in surroundings, coordination with local institutions, alternative in financing, leadership in governance, health facility approach, cleanliness of surroundings, public amenities in surrounding area, aesthetics of surrounding area, general waste management in surroundings and maintenance of surrounding area. All subsections have a maximum of ten marks, each based on five indicators. The aggregated maximum scores are 100 for district hospital Kayakalp checklist, and 60 each for bedded and non-bedded primary health centers, comprising 1/6th of the total kayakalp score.

By introducing this section, the government is emphatically promoting community participation. Earlier it had focused mainly on behavior change amongst health staff within the premises of an institute, and its impact was tremendous with incentivization of initiatives. Now the government has included

other stakeholders like community members, Panchayat Raj Institutions (PRI), Non-Government Organizations (NGO) and other public sector departments as a part of this campaign. Activities from within, like public rallies, marathons, *swachhata* walks, human chains, street plays/*nukkad nataks*/folk arts/folk-music, *etc.* will act as potent instruments of social advocacy and community participation. It ensures every stakeholder from outside health facility premises and communities are gradually involved for hygiene and infection control and thereby helping health promotion at the grass-root level. World Health Organization estimates that Swach Bharat Abhiyan in India would potentially have a spectacular impact on improving the sanitation of communities and thereby averting disease burden within five years of its launch [4]. The integration and extension of such activities will be another opportunity for healthcare providers to make an impact on health indicators and disease burden. Subsequently, as all stakeholders adopt these initiatives, there will be a visible and viable behavior change of the public at large.

To, summarize Beyond hospital boundary will act as a novel, innovative game-changer tool for community participation in sanitation, hygiene, and infection control.

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Spirometry in COVID-19 Times – An Emerging Dilemma

Spirometry is useful for the diagnosis, management and monitoring of chronic respiratory conditions in children, especially asthma. As severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) can be transmitted *via* aerosol generation, coughing or sneezing [1], spirometry can pose a risk for transmission of the virus as the procedure requires generation of high minute ventilation and flow, and for the patient to be in close contact with the technician and equipment. We have tried to extrapolate information from adult guidelines on spirometry during the COVID-19 pandemic.

As the pandemic evolves over time, prevalence can be classified to be in the pandemic phase, post-peak phase or post-pandemic phase, with high, low or controlled community prevalence, respectively. This can be determined by the local health authorities. Level 1 safety recommendations are suggested for those places in the pandemic phase, Level 2 in the post-peak phase, and Level 3 in the post-pandemic phase [2].

Indication for spirometry: During the pandemic phase and post-peak phase, clinicians should restrict referrals for spirometry to those patients who require it urgently or when it is essential for their diagnosis [3]. A pediatrician can teleconsult the patient and determine the need for spirometry, to reduce the number of visits of a child to the hospital. One should; however, not perform spirometry on patients with a clinical suspicion of COVID-19, influenza-like illness (ILI) or severe acute respiratory infections (SARI) [4]. In children who test positive for COVID-19 infection, all pulmonary function tests (PFTs) should be deferred for at least 30 days post-infection, as viral shedding can occur even after 10 days.

Guidelines for performing spirometry: The following are the Level 1 safety precautions one must follow while performing a spirometry in children during the pandemic phase. Similar precautions are advised for Level 2 in post-peak phase as it might be difficult to determine pre-test probability of infection in children.

- *Screening:* The clinician or technician performing the test, the child and the caregiver, should all be screened prior to entering the PFT room. A proposed triage questionnaire is available in the European Respiratory Society statement [2]. Patients who screen positive should not undergo spirometry.
- *Infrastructure:* Under ideal conditions, negative pressure rooms or HEPA filtration systems with UV germicidal lamps are recommended. However, this may not be available in most centres. Hence, at least a separate enclosed room with adequate ventilation should be designated for performing spirometry [2]. Waiting areas should be re-organized to ensure patients are not in contact with those who are febrile. Thorough cleaning and ventilation of both the room and equipment needs to be performed between each test [5]. The number of air exchanges between procedures need to be