Letter from Mangalore

OF ADENOAMNESIA, ADENOPRAXIA AND ADENOESTHETES

The world is made of two kinds of people; those who divide the world into two kinds of people and those who do not. I belong to the former. This two-fold classification of the world lends itself to a phenomenon of infinite divisibility if one is foolish enough. This current reflection on the kinds of doctors in the world was triggered by successive successful detection of lymph nodes on clinical examination over two weeks that helped diagnose patients that had otherwise undergone investigations without a definitive diagnosis being reached.

Case 1

A 30-year-old patient from a village, 350 km away, came with fever with no localizing symptoms for three weeks. He had come with a prior evaluation from another medical college, had normal blood counts, a raised erythrocyte sedimentation rate (ESR), a normal biochemical profile, and a normal X-ray chest and ultrasound abdomen. He was diagnosed as having a rickettsial infection based on a positive Weil–Felix test but did not respond to treatment. On physical examination, he turned out to have an enlarged supraclavicular matted lymph node that revealed caseating granulomas on a fine-needle aspiration cytology (FNAC). Although the cartridge-based nucleic acid amplification test (CB-NAAT) was negative for *Mycobacterium tuberculosis*, he had a good therapeutic response to anti-tuberculosis (TB) treatment.

Case 2

A 50-year-old woman reported to us 6 years after successful surgery and radiotherapy for oesophageal cancer. She had developed swellings in the abdomen over the past 2 months. Her ultrasound and CT scan reports suggested the presence of a mass of abdominal lymph nodes, and she was advised an abdominal biopsy, for which she presented to our hospital. On clinical examination, we detected a mass of lymph nodes in the left supraclavicular region that turned out to be metastatic adenocarcinoma on FNAC, and an abdominal biopsy was avoided.

The diagnoses reached in these patients were by no means diagnostic triumphs, but rather straightforward findings on a thoughtful but comprehensive examination. This experience led to me to reflect on two kinds of doctors in the world; those who can detect lymphadenopathy and interpret its importance, and those who cannot. After more than three decades in the business, I would like to think that I belong to the first category. In doctors who cannot detect lymphadenopathy, it is either as a sin of omission (they do not look for lymph nodes), or of commission (they cannot detect abnormal lymph nodes).

This letter will introduce new terms in the medical lexicon to meet the felt needs of many who have noted these acts of omission and commission in their peers and juniors but till now were literally at a loss of words to describe them. On a positive note, it will also coin a term for those physicians who recognize the value of lymphadenopathy as a sign, as a part of a thoughtful and complete examination.

Adenoamnesia

It is a condition wherein the doctor forgets to look for lymph nodes. This condition is often seen in physicians who miss findings in other regions such as the skin, oral cavity, the heart and the abdomen. The content and process of physical examination of those with adenoamnesia overall can have a casual and cursory feel. The sufferer usually attributes this to lack of time, but the underlying risk factors are different. These doctors often arise in alma maters with an over-reliance on investigations; where these are not seen as a complement to physical examination but almost as a substitute. They may consider physical examination as a ritual waste of time, and consider X-rays, ultrasounds and echocardiograms as a substitute for examination of these systems. These doctors may miss lymph nodes because (thankfully) ultrasounds of the neck and axilla are not routine. Institutions can screen residents for adenoamnesia, and treat them with clinical reskilling, but the same in senior doctors and consultants may not be amenable to easy treatment.

Adenopraxia

It is a condition in which a doctor is not able to perform a competent lymph node examination despite normal motor, sensory, cerebellar and extrapyramidal function. This skill may have been previously learnt (for the examinations) but an environmental deprivation of exposure to a definite culture of bedside medicine, of presenting the physical examination findings in bedside rounds leads to loss of the skill. A strong association has also been found with non-demonstration of these skills by their clinical tutors in some studies. A tell-tale eponymous sign of adenopraxia (based on unpublished and unpublishable data!), with a positive likelihood ratio of more than 10 has been discovered by me (Bhargava's sign of adenopraxia). This sign of adenopraxia is based on the right–left disorientation, which is strongly suggestive of this condition. When a student/resident is asked to demonstrate the presence of axillary lymph nodes, they use their right hand for the right axilla and the left hand for the left axilla, a reversal of the convention, resulting in a clumsy inelegant technique, which misses the lymph nodes. Migration studies trials suggest that adenopraxia has a better prognosis than adenoamnesia, with residents able to regain this ability when moved to conducive clinical environments.

Adenoesthetes

These are those who not only excel in detecting abnormal lymph nodes, but who can carefully curate a list of differential diagnosis, which includes the common, the serious and the rare not to be missed conditions. The adenoesthetes regard the lymph nodes in each region of the body as an important window into internal diseases. Adenoesthetes often extend the usual lymph node examination to involve other nodes for example the epitrochlear lymph node. While detection of epitrochlear nodes in the past was associated with secondary syphilis and the folklore of sailor handshakes (where sailors would grasp the forearms of their peers and contacts to

detect enlarged epitrochlear nodes as a mark of syphilis); often in patients with lepromatous leprosy, more recently in AIDS as part of a generalized lymphadenopathy, or even in active rheumatoid arthritis.[1] Adenoesthetes can be identified by the meditative look on their faces, as they caress the lymph nodes, evaluate the size, consistency, discreteness, mobility and integrate this with history and other examination while their brains scan through the list of causes of lymphadenopathy. They can differentiate between a lymph node that can be followed up from the ones that are worthy of investigation and save time and trouble for patients.

Adenoesthetes are usually physicians who are adept at performing a low-cost non-invasive PET (physical examination with thoroughness) scan on their patients. These physicians use lymph node examination to diagnose a range of infections, from the common viral infections such as infectious mononucleosis to the exotic bacterial ones such as scrub typhus, tularaemia or even plague. The bubonic plague in Surat in 1994 was suspected due to presentation with enlarged inguinal lymph nodes. This diagnosis was contested but was finally proven.[2] In diseases such as scrub typhus, adenoesthetes use the presence of an enlarged and tender lymph nodes to direct search for an eschar in the region, which is otherwise painless and non-pruritic. Adenoesthetes never forget to detect the supraclavicular lymph node of metastasis. In patients with a snakebite, an adenoesthete will detect regional lymph node enlargement as an early sign of systemic envenomation in a venomous snakebite. The elite among these aesthetes are adept at diagnosing rarer non-infectious entities that can present with fever and tender lymphadenopathy such as Castleman disease, Kawasaki disease and Kikuchi disease.

Alvan Feinstein has remarked, 'To advance the art and science of clinical examination, the equipment a clinician most needs to improve is himself'.[3] Our fingertips are a marvel of evolution and endowed with high-sensitivity mechanoreceptors (Meissner corpuscles, Pacinian corpuscles, Ruffini endings and Merkel disks) linked to the cortex through rapid conducting large fibre systems. It will be a tragedy if cerebral cortices of doctors are starved of these sensory inputs and undergo cognitive decline. In a profession with a legacy of more than 2500 years, good as well as bad examples are communicable. Adenoamnesia begets adenoamnesia, as does adenopraxia beget adenopraxia. Adenoesthetes beget adenoesthetes and this is the final advantage of being one, of passing onward the legacy of a careful examination to an interested student, who will in turn transmit it hopefully to his/her own.

REFERENCES

1 Selby CD, Marcus HS, Toghill PJ. Enlarged epitrochlear lymph nodes: An old physical sign revisited. *J R Coll Physicians Lond* 1992;**26:**159–61.
2 Shivaji S, Bhanu NV, Aggarwal RK. Identification of *Yersinia pestis* as the causative organism of plague in India as determined by 16S rDNA sequencing and RAPD-based genomic fingerprinting. *FEMS Microbiol Lett* 2000;**189:** 247–52.
3 Sackett DL, Haynes RB, Guyatt GH, Tugwell P (eds). *Clinical epidemiology: A basic science for clinical medicine.* 2nd ed. Boston: Little Brown; 1991.

ANURAG BHARGAVA

[**To cite:** Bhargava A. Of adenoamnesia, adenopraxia and adenoesthetes (Letter from Mangalore). *Natl Med J India* 2024;**37:**111–12. DOI: 10.25259/NMJI_310_2024]