

Early Detection Tool of Nasopharynx Cancer Which is Fast, Easy and Cheap


Wednesday, 29 January 2014 WIB, By: Marwati



Nasopharynx Cancer (NPC) is a type of cancer with low prevalence, which is less than 1 per 100 thousands annually. But in certain places in Africa and Southeast Asia, the prevalence can be high while in Indonesia it is 6.2 per 100 thousands.

In Indonesia, it ranks fourth among other cancer diseases. Unfortunately, devices to detect it are not much. Many patients are already in the further stadium so difficult to treat.

“The higher stadium makes the lower level of success, which is lower than 30 percent. Treatment has to be combined between radiotherapy and chemotherapy with high side-effects and high costs. While the low stadium of NPC can be treated by radiotherapy only with percentage of success at over 80. Thus, a method is required to detect it,” said Dewi Kartika Paramita, S.Si., M.Si., Ph.D., inventor of early stadium of nasopharynx, recently at Faculty of Medicine at UGM.



Dewi revealed that she developed a fast, easy and accurate tool to detect NPC at a much cheaper cost. One kit of the testing tool, called IgG NPC Strip, costs only Rp50 thousands. It will go to the market after registration at Ministry of Health, The research was initially driven by Prof. Sofia Mubarika.

NPC detection can be done using protein from Epstein-Barr (EBV) virus as NPC is correlated with EBV. Some EBV proteins can be used as a marker to detect NPC, one of those is early antigen (EA) protein.

“IgG NPC Strip uses EBV protein as antigen to detect IgG antibody to EA protein in patient with nasopharynx cancer,” she added, saying that the making of the tool cooperates with Lab. Hepatika NTB.

One kit of IgG NPC Strip contains 1 strip, 1 tube contains 100 µL of buffer solution to dilute the blood, 1 lancet, and 1 stick of plastic to transfer the blood to the buffer solution. It is easy to use just like pregnancy test kit. But this uses one drop of blood for serum testing. The blood is diluted with the buffer then the NPC strip is put in the solution.

“The result can be seen in 3-5 minutes. If two pink strips emerge, it means positive while one strip means negative,” said the lady born in Yogyakarta, 3 March 1971.

If someone is found negative, further test will be done after 6 months. This tool has good sensitivity and specificity.

Related News

- [Faculty of Medicine Launched Nasopharynx Cancer Detection Tool](#)
- [Photodynamic Therapy Increases Life Expectancy of Nasopharynx Cancer Patients](#)
- [Early Detection Tool of Nasopharynx Cancer Which is Fast, Easy and Cheap](#)
- [Early Detection the Best Way to Prevent Cancer](#)
- [UGM Researcher Creates Detection Tool for Dengue Virus](#)