NATIONAL HEMOVIGILANCE ANNUAL REPORT 2019

Introduction:

The term hemovigilance is derived from the Greek word “hema” = blood & the latin word “vigilance” = watchful. Hemovigilance is a set of surveillance procedure which includes monitoring, identification, reporting, investigation & analysis of adverse events, near miss and reactions related to entire transfusion chain (collection of blood & its component to the follow up of its recipients).

The information gained from the investigation and analysis help in taking corrective and preventive action, so that unexpected and undesirable effects can be prevented from occurring thereafter. Thus, hemovigilance is an important part of quality system in the blood transfusion service to improve the safety of blood transfusion.

In 2017, Nepal has initiated hemovigilance system based on a non-punitive and an anonymized approach in order to encourage the reporting of related adverse events and is governed by Government of Nepal. In the first phase, the program has developed “National Hemovigilance reporting guideline in Nepal” and its orientation in the nominated two government and two private hospitals.

In 2018 National hemovigilance annual report data, 1012 transfusion monitoring recorded details were reported to National Public Health Laboratory/ National Bureau for Blood Transfusion Service (NPHL/NBBTS) and among them 13% had minor transfusion reactions. 2 samples from donors suspected for syphilis and HIV were received and confirmed for the same after retesting of all Transfusion Transmissible Infections (TTIs) [HIV, HBV, HCV & syphilis] and conveyed to the respective reporting Blood Transfusion Service Centres and donors.

Hemovigilance data of 2019 :

1561 transfusion monitoring recorded details were reported to NPHL/ NBBTS and among them 11 % had minor transfusion reaction. Fever, urticaria, change in blood pressure (±20 mm Hg) and change in pulse (±20/min) were detected more among the minor transfusion reactions.

4 samples were received from donors in a suspected reactive cases of HIV (1case), HBV (2cases) , Syphilis (1 case) during the screening procedure . These samples were retested for all TTIs at NPHL and among the 4 samples , 3 of them were true positive and 1 was false positive for HIV and conveyed to the respective reporting Blood Transfusion Service Centre and donors.

Prior to transfusion, 8 samples were reported to Nepal Red Cross Society/ Central Blood Transfusion Service (NRCS/ CBTS)related to incompatible cross matching (3 cases) and confirmation of ABO/Rh typing (05 cases) . All the cases were solved by problem solving team at NRCS/ CBTS accordingly.

Remarks:

1. To be effective hemovigilance system requires open and honest reporting and investigation system in the respective hospitals and Blood transfusion service centres .
2. Need to have the better system of traceability related to it.
3. A good co-operation between related stake-holders and proper functioning of Hospital Transfusion Committee.
4. Requirement of evaluation of Transfusion transmitted infections testing kits and reagents .

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