



“ANISOTIC BABY” – A case report by Dr Holla & team; KVG Medical College, Sullia, 21-08-2018.

HOSPITAL
SHASTRI NAGAR, KANPUR
Tel. : 2216788, 2297827



HEALTH RECORD



Name Bio. N. Yashna
Sex Female
Date of Birth 21/01/18 Birth Wt. 2.21kg
Father's Name A. Kishor
Address _____
Type of Delivery N/D
Neonatal Risk Factors _____

IMMUNISATION RECORD						
AGE	VACCINE	DUE ON	GIVEN ON	WEIGHT	HEAD CIRCUMFERENCE	
Date of Birth: 21-01-2018	BCG	✓	20/1/18			
	OPV - (0) dose	✓	21/1/18			
	Hepatitis-B - I dose	✓	21/1/18			
1½ Months (45 days)	DTP / DTPa - I dose	<u>Pentacel</u>	14/3/18	4.4		
	OPV/IPV - I dose		14/3/18			
	Hib (H. influenzae type B) I dose		14/3/18			
	Hepatitis-B - II dose		14/3/18			
	Rotavirus - I dose	<u>Rotarix</u>		14/3/18		
	Pneumococcal Vaccine - I dose	<u>Synflorix</u>		14/3/18		
2½ Months	DTP / DTPa - II dose	<u>Pentacel</u>	14/4/18	5.34		
	OPV/IPV - II dose		14/4/18			
	Hib - II dose		14/4/18			
	Rotavirus - II dose	<u>Rotarix</u>		14/4/18		
3½ Months	Pneumococcal Vaccine - II dose	<u>Synflorix</u>		5.7		
	DTP / DTPa - III dose	<u>Pentacel</u>	15/5/18	5.7		
	OPV/IPV - III dose	<u>OPV</u>	15/5/18			
	Hib - III dose		15/5/18			
6 Months	Rotavirus - III dose	<u>Rotarix</u>				
	Pneumococcal Vaccine - III dose	<u>Synflorix</u>				
	Hepatitis B - III dose		21/7/18			
9 Months	Measles Vaccine					
15 Months	M.M.R. (Mumps, Measles, Rubella)					
After One Year	Chickenpox - I					
After One Year	Hepatitis A - 1st					
18 - 24 Months	DTP/DTPa/OPV/IPV - I Booster					
	Hib					
After 2 Years	Pneumococcal					
	Typhoid Vaccine					
After 4-5 Years	Booster dose every 3 years					
	DTP / DTPa, OPV - II Booster					
After 5 Years	Chickenpox - II dose					
	MMR - II dose					
ADDITIONAL VACCINES						
After 6 Months	Influenza - I					
	Influenza - II					
	Booster dose every year					
Other Vaccines	Meningococcal Vaccine					
	JE Virus Vaccine					

Proem: As communicated earlier also, with the introduction of bOPV and IPV in the Routine Immunization in India, KVG Medical College & Hospital Sullia through active collaboration with Taluka Health Officer (THO) of Health and Family welfare services, Government of Karnataka, in April 2016 established a dedicated vaccination clinic, operating as per WHO / GOI standard and guidelines under the supervision of Department of Community Medicine supported by pediatric and OBG departments. This has given us lot of opportunities for operational research. We do not have a fixed catchment area / target. All those eligible live births in the

college are administered Newborn vaccination as per newborn vaccination protocol. Many turn up for well baby clinic periodically coinciding with the MCTS compatible due dates for vaccination entered in the **vaccination card [HBR – the COMBOCARD]** issued at the time of discharge. This card is compatible with NIS and optional vaccines applicable to India. Many have “**Tayi-Card**” issued by the government. Data is submitted through HMIS regularly on 26th of every month to THO along with list of vaccinees for “MCTiSation”=online feeding to MCTS so as to include in the block coverage.

Present illustration: Many a time children do come from outside districts / states as in the present illustrative case study. This infant is daughter of a bank officer from Kanpur, UP transferred to Sullia branch. Parents are fully committed to the child and brought the baby to the facility for vaccination timely and got vaccinated. In the vaccination card, 21-07-2018 is mentioned as due date for the third dose of monovalent Hepatitis B vaccine for which the baby is brought.

Observations:

1. Child was born on 21-01-2018 but newborn vaccines – zero OPV, BCG and Hepatitis B birth dose were administered on 31 Jan 2018 which is not in compliance with newborn vaccination protocol.
2. First dose Pentavalent was administered on 14-03-2018 with 1st dose of PCV / Rota. OPV/IPV was marked as given.
3. In the 2nd visit on 14-04-2018, Quadrivac was administered with 2nd dose of PCV / Rota. OPV/IPV was marked as given.
4. In the third visit on 15-05-2018 again Quadrivac was administered with 3rd dose of PCV / Rota. OPV/IPV was marked as given.
5. Today – 21-7-2018 is their 4th visit, brought the baby for 3rd dose of monovalent HepB.

Aberrations from National Immunization Schedule:

1. Hepatitis Birth dose was administered on 10th day, ideal is to administer within 24hrs and hence it cannot be fed to HMIS and is not effective in stopping vertical transmission – a lost opportunity for the child in spite of being born in an institution with specialists on board.
2. In the 1st visit on 52nd day, child was administered Pentavalent. Both OPV & IPV were marked as given but on reconfirmation telephonically, OPV was administered and IPV was not administered attributed to non availability in the private sector and not scored off. Optional vaccines PCV / Rota were administered. All were on payment.
3. In the 2nd visit on 83rd day Quadrivac was given which has no Hepatitis B. PCV & Rota administered; OPV / IPV both marked. This data cannot be transferred to HMIS as pentavalent 2nd dose.
4. In the 3rd visit on 114th day, again Quadrivac was given which has no Hepatitis B. PCV & Rota administered; OPV / IPV both marked. This data cannot be transferred to HMIS as pentavalent 3rd dose.
5. Today [21-07-2018 – 181th day] is the 4th visit brought for receiving 3rd dose of Hepatitis B - monovalent.

On confirming that IPV was not administered, 0.1mL IPV was administered today intradermally to the right upper arm and 0.5mL of HepB monovalent was administered IM in the anterolateral aspect of mid thigh in the dedicated vaccination clinic. Parents are told to bring the baby after 8 weeks for the 2nd dose of IPV.

Discussion / concern: Since the vaccination schedule is not NIS friendly, the data cannot be transferred to HMIS hence contributing to spurious low coverage. All vaccines were from private sector with no VVM hence the potency is questionable. Generally private sector is not monitored either by the Govt or by the development partners. Just because the child is from elite family and being vaccinated in a private institution, missed the opportunity of receiving vaccines of NIS with known potency that too free of cost. Key messages were either not given to the parents or they might not have understood the messages and hence unable to decipher the vaccination card.

In India, of the estimated 270 lakhs [2.7 crore] live births annually, >10% are provided with such vaccination cards who may potentially remain vaccinated but unimmunized.

The SWOT:

1. **Strength:** Parents are educated and of high income group, were able to buy the vaccines both essential and the optional. Parents were highly committed to the baby: they regularly visited the facility on stipulated dates.
2. **Weaknesses:** Poor inter-sectoral co-ordination between Government and the private sector with resultant huge gap in the operational knowledge. IAP who strongly “endorsed” the revised NIS iterated that it has removed the revised IAP schedule 2016 but not reached the private service providers. Key messages were probably not given to the parents effectively.
3. **Opportunities:** Proactive knowledge updating by the private sector by attending the training programmes arranged frequently by the Govt at various levels from centre to block / planning units. Invite the Govt service providers to monitor and provide supportive supervision, procure the essential vaccines with VVM for administering free to the beneficiaries, documenting in a compatible mode to transfer vaccination data through HMIS on regular basis.
4. **Training:** a continuous process with mutual participation.

Solution: To address many such issues and programmatic errors, KVG team made a “DEMOSITE” by establishing a dedicated vaccination clinic, appreciated by the IAPSM and included in its compendium as one of the best practices to be replicated.

1. To establish a dedicated vaccination clinic in collaboration with local health authority in every birthing institution / tertiary care hospitals / Medical College Hospitals for providing free vaccination services at least for the essential vaccines of NIS as per gold standard. Cross learning visit helps in rapid replication.
2. A standard HBR [Home Based Record – as emphasized by WHO: Dr David Brown]. Government is already having standard vaccination card in all the districts but with essential vaccines of NIS. For the private sector for clarity and uniformity, district specific **Combo-card** is needed which incorporates essential vaccines in one table and the optional vaccines in the 2nd table side by side. We have developed and using the district specific **COMBOCARD** in our College.

Please do feel free to contact us; it will be a great honor for us to interact with passionate RI Lovers.