

TABLE 1. Study protocol for paediatric hepatotoxicity

Clinical history number _____

Name/Surname _____

Age (Date of birth) _____

Sex: 1. Male 2. Female _____ Weight (kg) _____ Height (cm) _____ Body Surface _____

Area (BSA= $\frac{\text{weight} \times \text{height}}{3600}$) (m²) _____ Referred from: 1. Hospital 2. Primary health care centre _____

City: _____

Drug(s) suspected of causing the reaction (active ingredient) _____ Brand name _____

Total daily dose (mg) _____ Interval (h) _____ Route of administration: 1. Oral; 2. Intravenous; 3. Intramuscular; 4. Sublingual; 5. Rectal; 6. Aerosol; 7. Topical; 8. Other. _____

Clinical indications: _____

Duration of treatment: from (day/month/year) _____ to (day/month/year) _____

Duration of treatment (days) _____

Within this period, when did the reaction appear? _____ Did it disappear when medication was suspended? _____

1. Yes; 2. no; 3. N/A _____ Did it reappear when medication was resumed? 1. Yes; 2. no; 3. N/A _____

Time elapsed until resolution of the reaction (days) _____

Description of the adverse reaction(s) _____

(including relevant results of physical examination or laboratory analysis) and extra hepatic signs/symptoms

Asthenia/Anorexia: 1. Yes; 2. No. Exanthema: 1. Yes; 2. No Pruritis: 1. Yes; 2. No. Jaundice: 1. Yes; 2. No. Eosinophilia: 1. Yes; 2. No

Fever: 1. Yes; 2. No

Concomitant medication _____

Prescribed or self-medicated, taken by the mother during lactation (excluding the dose taken to treat the adverse reaction)

Drug	Daily dose	Route of administration	Indication	From	To

Relevant clinical background

Allergies. Congenital metabolic disorders. Apgar score. Birth weight. Type of nutrition. Nutritional status. Obstetric background. Coombs test. Medication taken by the mother during pregnancy and lactation.

Diagnostic tests

ECG. CT. Cholangiography. Plasma levels of the drug and/or its metabolites, etc.

Liver biopsy

Description and date performed

Plasma levels

Outcome of the reaction (mark as appropriate)

Spontaneous resolution. Treatment required. Persistence of adverse reaction. Need for hospitalisation. Need to prolong previous hospitalisation. Permanent or significant incapacity. Recovery. Patient's life endangered. Death.

	Before treatment (date)	Start of treatment (date)	Evolving (date)	Evolving (date)	At discharge (date)
Biochemical data					
Glucose					
Urea					
Creatinine					
Total proteins					
Albumin					
Alpha-1(g/L)					
Alpha-2					
Beta					
Gamma globulins					
Total bilirubin(n =)					
Direct bilirubin					
AST(range:)					
ALT(range:)					
GGT (range:)					
Alkaline phosphatase (range:)					
Iron					
Transferrin					
Copper					
Ceruloplasmin					
Immunoglobulin M					
Immunoglobulin G					
Immunoglobulin A					
Haemogram					
Erythrocytes					
Haemoglobin					
Haematocrits					
MCV					
ESR					
Platelets					
Prothrombin activity					
Leukocytes					
Polymorphonuclear leukocytes					
Lymphocytes					
Monocytes					
Eosinophils					
Basophils					

	Initial (date)	Evolving (date)	At discharge (date)
Markers			
IgM anti-HAV			
HBsAg			
Anti-HBc			
Anti-HCV: ELISA			
Anti-HCV: RIBA			
Anti-HCV: PCR			
Anti-HEV			
CMV IgM			
VEB IgM			
Others			
Autoantibodies			
ANA			
AML			
AMA			
Anti-LKM-1			
Rheumatoid Factor			
Alpha-1-antitrypsin (n = ...)			
LE cells			

Exclusion of other causes

Congenital malformations

Biliary atresia
 Congenital choledochal cyst
 Caroli disease
 Malignant choledochal stenosis

Hepatic and biliary tumours

Toxic

Alcohol
 Industrial intoxicants (glue, varnish, vinyl toys, etc.)
 Illegal drugs

Systemic diseases affecting the liver

Inflammatory bowel disease
 Rheumatoid arthritis
 Systemic Lupus Erythematosus
 Polyarteritis nodosa
 Cardiac insufficiency
 Hypo/Hyperthyroidism
 Multiple transfusions
 Acute abdominal trauma
 Anoxia / Hypoxia

Vaccinations

Haemolytic anaemias

Congenital
 Acquired

Post-surgical hepatitis

Halothane anesthesia
 Bacterial infections / Hypoxia
 Hypotension
 Other drugs

Pregnancy

Tattoos

Physiological hyperbilirubinemia

Newborn
 Breastfeeding

Viral infections

Hepatitis A. B. C. D

Virus infections

Cytomegalovirus
 Toxoplasma
 Epstein-Barr
 AIDS
 Measles
 Herpes simplex
 Varicella zoster virus
 Rubella

Toxins (plants, fungi)

Metabolic disorders

Gilbert syndrome
 Wilson disease
 Alpha-1 antitrypsin deficiency
 Cystic fibrosis
 Glycogen storage disease
 Galactosaemia
 Tyrosinemia

Neoplastic diseases

Coxsackie
 Echovirus

Protozoan infections

Toxoplasma

Pneumocystis carinii

Bacterial infections

Sepsis. Salmonellosis. Brucellosis

Intestinal parasitosis