

Appendix 1: Forty-nine Birth Defect Cases Recorded in December 2012

NVD Normal Vagina Delivery
Cs Caesarean
DOB Date of Birth

(CASE1)

DOB ; 17-12-2012
Address; Garmah -Rashad
Birth order & condition of other siblings ; 7th , normal 6 siblings
DX; Small ASD , small to moderate PDA
Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 34 yrs , house wife
Father's age & occupation ; 35 yrs , free worker
Degree of kinship ; far relatives

(CASE2)

DOB ; 19-11-2012
Address; Saglaweya - Chiffa
Birth order & condition of other siblings ; 3rd , her 1.9 year old sister
DX; PDA
Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; just her sister
Abortions ; negative
Still births ; negative
Mother's age, occupation; 22 yrs , house wife
Father's age & occupation ; 25 yrs, free worker
Degree of kinship ; 2nd degree

(CASE3)

DOB ; 9-10-2012

Address; A'amereya - Fallujah

Birth order & condition of other siblings ; 2nd , normal sibling

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; negative

Still births ; negative

Mother's age , occupation; 18 yrs , house wife

Father's age & occupation ; 22 yrs , free worker

Degree of kinship ; 3rd degree

(CASE4)

DOB ; 3-12-2012

Address; Alaskary district

Birth order & condition of other siblings ; 4th , 1st sister , 6 yrs old ,normal , the 2nd sister born with CP & blindness & died 1 yr ago at the age of 2 yrs, the 3rd 3 yrs old sister is normal

DX; Moderate size ASd secundum with aneurysm

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ;2 before this baby

Still births ; negative

Mother's age , occupation; 23 yrs , house wife

Father's age & occupation ; 31 yrs , free worker

Degree of kinship ; 1st degree relatives



(CASE5)

DOB ; 17-12-2012

Address; Halabsah _Rashad

Birth order & condition of other siblings ; 7th

DX; Down syndrome

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; one of his 3rd degree relatives have NTD

Abortions ; negative

Still births ; negative

Mother's age , occupation; 38 yrs , housewife

Father's age & occupation ; 40 yrs , free worker

Degree of kinship ; 3rd degree



(CASE6)

DOB ; 24-10-2012

Address; fallujah-Thubbadh district

Birth order & condition of other siblings ; 4th , normal 3 older siblings

DX; Small ASD

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; his male cousin was a case of Down died at age of 8 months

Abortions ; negative

Still births ; negative

Mother's age , occupation; house wife , about 30 yrs

Father's age & occupation ; about 35 yrs , free worker

Degree of kinship ; not relatives

(CASE7)

DOB ; 25-12-2012

Address; Fallujah- jighaifi

Birth order & condition of other siblings ; 1st

DX; congenital large bowel obstruction

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; negative

Still births ; negative

Mother's age, occupation; 18 yrs , house wife

Father's age & occupation; 28 yrs , free worker

Degree of kinship ; not relatives



(CASE8)

Dob; 3-12-2012

Address; Jighaify

Type of anomaly; RV Hypoplasia & TR

Birth order & condition of other siblings; 2nd , normal 1st baby

Pregnancy history; normal
Type of delivery; Cs
Abortions; negative
Stillbirths; negative
Family history of anomalies; negative
Mother ; 22 yrs , house wife
Father; 31 yrs , free worker
Degree of kinship; 1st degree

(CASE9)

DOB ; 8-7-2012
Address; Garmah
Birth order & condition of other siblings ; 8th , normal 7 siblings
DX; Hydrocephaly
Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 33 yrs , house wife
Father's age & occupation ; 33 yrs , free worker
Degree of kinship ; 3rd degree



(CASE10)

DOB ; 29-8-2012
Address; Alaskary district
Birth order & condition of other siblings ; 3rd , normal 2 older siblings
DX; left foot syndactly

Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 27 yrs , house wife
Father's age & occupation ; 33 yrs , free worker
Degree of kinship ; not relatives



(CASE11)

DOB ; 2-12-2012
Address; Fallujah - Bazzarah
Birth order & condition of other siblings ; 2nd baby , normal 1st sibling
DX; moderate ASD swcondum+ aneurysm , high PVR
Type of delivery ; CS
Pregnancy history ; normal
Family history of this or other anomaly ; +ve family history of CHD in his cousin from female size aged 1 yr
Abortions ; negative
Still births ; negative
Mother's age, occupation; 25 yrs , house wife
Father's age & occupation ; 31 yrs , free worker
Degree of kinship ; not relatives

(CASE12)

DOB ; 12-12-2012

Address; Fallujah (Nazzal) then Haditha for the last 2 yrs

Birth order & condition of other siblings ; 3rd , 2 normal older sisters

DX; Gastroschisis (defectnegativity near & to the rt of umbilical stump with herniation of stomach , small & large intestine) + partial syndactly of rt foot

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; negative

Still births ; negative

Mother's age, occupation; 21 yrs , house wife

Father's age & occupation ; 41 yrs , free worker

Degree of kinship ; not relatives



(CASE13)

DOB ; 10-12-2012

Address; Halabsa

Birth order & condition of other siblings ; 2nd , normal 1st baby

DX; Hydrocephaly

Type of delivery ; CS

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; 1

Still births ; negative

Mother's age , occupation; 22 yrs

Father's age & occupation ;

Degree of kinship ;

(CASE14)

Dob; Stillbirth , 24-12-2012

Address; Fallujah- Bu'alwan subdistrict

Type of anomaly; Anencephaly , upper spina bifida , abnormally long upper & lower limbs , (frog like)

Birth order & condition of other siblings; 3rd , 1 normal alive sibling & 1 deformed stillbirth

Pregnancy history; normal

Type of delivery; NVD

Abortions; negative

Stillbirths; 1

Family history of anomalies; negative

Mother ; 19 yrs , house wife

Father; 26 yrs , free worker

Degree of kinship;



(CASE15)

DOB ; 17-12-2012

Address; Garmah -Sbaihat

Birth order & condition of other siblings ; 7th , normal 6 siblings

DX; low spina bifida + short webbed neck

Type of delivery ; Cs

Pregnancy history ; normal

Family history of this or other anomaly ; normal

Abortions ; negative

Still births ; negative

Mother's age , occupation; 38 yrs , housewife

Father's age & occupation ; 38 yrs , free worker

Degree of kinship ; 1st degree



(CASE16)

DOB ; 17-12-2012

Address; Nu'aimeya district

Birth order & condition of other siblings ; 4th , normal 3 siblings

DX; Down syndrome + congenital Hydronephrosis

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; 3(1 at 2004 & 2 at 2006)

Still births ; negative

Mother's age , occupation; 40 yrs , house wife

Father's age & occupation ; 50 yrs, free worker

Degree of kinship ; not relatives



(CASE17)

DOB ; 30-11-2012

Address; Habbaneya

Birth order & condition of other siblings ; 2nd , normal 1 yr old sibling

DX; Large ASD , Small PDA

Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 17 yrs old , house wife
Father's age & occupation ; 22 yrs old , free worker
Degree of kinship ; 2nd degree

(CASE18)

DOB ; 14-12-2012
Address; Nu'aimeya
Birth order & condition of other siblings ; 2nd , normal 1st baby
DX; Macrocephaly
Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 25 yrs , house wife
Father's age & occupation ; 40 yrs , free worker
Degree of kinship ; cousins

(CASE19)

DOB ; 7-2012
Address; Alshuhada'a
Birth order & condition of other siblings ; 2nd , normal sister
DX; ASD
Type of delivery ; CS
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 20 yrs , house wife
Father's age & occupation ; 20 yrs , free worker
Degree of kinship ; 3rd degree

(CASE20)

Dob; 25-11-2012

Address; Habbaneya

Type of anomaly; ASD , PS

Birth order & condition of other siblings; 7th , 1st 13 yrs old sibling have hypothyroidism , he is apart of twin

Pregnancy history; normal

Type of delivery; NVD

Abortions; 3

Stillbirths; negative

Family history of anomalies; negative

Mother ; 42 yrs , house wife

Father; 39 yrs, solidier

Degree of kinship; 2nd degree relatives

(CASE21)

DOB ; 9-2012

Address; Garmah

Birth order & condition of other siblings ; 7th , normal 6 siblings

DX; Hydrocephaly, operated on

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; negative

Still births ; negative

Mother's age , occupation; 28 yrs , house wife

Father's age & occupation ; 30 yrs , free worker

Degree of kinship ; 1st degree



(CASE22)

DOB; 6-12-2012

Address; Garmah

Type of anomaly; Spina Bifida + meningocele

Birth order & condition of other siblings; 1st

Pregnancy history; normal didn't use Folic acid during pregnancy

Type of delivery; NVD

Abortions; negative

Stillbirths; negative

Family history of anomalies; negative

Mother ; 16 yrs old , house wife

Father; 32 yrs , free worker

Degree of kinship; 3rd degree



(CASE23)

DOB ; 16-12-2012

Address; Fallujah-Nassaf

Birth order & condition of other siblings ; 1st baby

DX; TOF , ASD, PDA

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; 2

Still births ; negative

Mother's age , occupation; 20 yrs , house wife

Father's age & occupation ; 25 yrs , free worker

Degree of kinship ; far relatives

(CASE24)

DOB ; 3-8-2012

Address; Alresalah district

Birth order & condition of other siblings ; 1st

DX; DORV + Ps

Type of delivery ; NVD , midwife

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; negative

Still births ; negative

Mother's age , occupation; 26 yrs , housewife

Father's age & occupation ; 32 yrs , free worker

Degree of kinship ; not relatives

(CASE25)

DOB ; 12-12-2012

Address; Althubbadh district

Birth order & condition of other siblings ; 1st

DX; small ASD , small VSD

Type of delivery ; NVD

Pregnancy history ; NVD

Family history of this or other anomaly ; normal

Abortions ; negative

Still births ; negative

Mother's age , occupation; 18 yrs , housewife

Father's age & occupation ; 30 yrs, free worker

Degree of kinship ; 1st degree

(CASE26)

DOB ; 24-11-2012

Address; Saglaweya

Birth order & condition of other siblings ; 2nd , 1 normal older sibling . her twin have ASD

DX; ASD & PDA

Type of delivery ; NVD , twin

Pregnancy history ; Normal

Family history of this or other anomaly ; her 23 yrs old sister (from 1st wife) is a case of CP

Abortions ; negative
Still births ; negative
Mother's age , occupation; 22 yrs , house wife
Father's age & occupation ; 44 yrs, free worker
Degree of kinship ; not relatives

(CASE27)

DOB ; 4-2012
Address; Fallujah
Birth order & condition of other siblings ; 2nd , her older brother died due to neonatal
diabetis + TOF at age of 3 days
DX; Werding Hoffman disease
Type of delivery ; Cs
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 22 yrs , house wife
Father's age & occupation ; 29 yrs , policeman
Degree of kinship ; cousins

(CASE28)

DOB ; 25-12-2012
Address; Saglaweya –Shuhada'a
Birth order & condition of other siblings ; 4th , 2nd sibling died at age of 9 months due
to kernicterus normal other siblings
DX; ASD
Type of delivery ; NVD
Pregnancy history ; egestational hypertension
Family history of this or other anomaly ; negative
Abortions ; 9
Still births ; negative
Mother's age , occupation; 40 yrs , house wife
Father's age & occupation ; 45 yrs , free worker
Degree of kinship ; 1st

(CASE29)

DOB ; 15-10-2012

Address; Garmah -Dawaya

Birth order & condition of other siblings ; 11th , normal 10 siblings

DX; moderate ASD secundum with aneurysm , mild Ps

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; her cousin from mother side (female) aged 2 yrs have ASD & VSD , with no previous family history

Abortions ; negative

Still births ; negative

Mother's age , occupation; 40 yrs, house wife

Father's age & occupation ; 40 yrs , farmer

Degree of kinship ; 2nd degree

(CASE30)

DOB ; 12-2009

Address; Abughraib

Birth order & condition of other siblings ; 3rd , normal 2 older siblings

DX; Microcephaly + CP

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; negative

Still births ; negative

Mother's age , occupation; Intisar Abid Jawad , 37 yrs , house wife

Father's age & occupation ; 37 yrs , hard worker

Degree of kinship ; not relatives

(CASE31)

DOB ; 18-12-2012 died on 19-12

Address; Fallujah- Zowba'a

Birth order & condition of other siblings ; 9th

DX; Dysmorphic features , low set ears , claw hands with overlapped fingers , small penis , long toes

Type of delivery ; NVD

Pregnancy history ; 3rd trimester bleeding

Family history of this or other anomaly ; His uncle is Down

Abortions ; 3
Still births ; negative
Mother's age , occupation; 37 yrs , house wife
Father's age & occupation ; 35 yrs , free worker
Degree of kinship ; 2nd degree



(CASE32)

DOB ; 27-10-2012
Address ; Joolan
Birth order & condition of other siblings ; 1st
DX; Moderate size ASD
Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation ; 21 yrs , student
Father's age & occupation ; 31 yrs , high school teacher
Degree of kinship ; not relatives

(CASE33)

DOB; 5-2008
Address ; Fallujah- Almu'tasim district
Birth order & condition of other siblings ; 4th , normal 3 older siblings
DX; cleft lip & palate
Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; her aunt born in 1990 with spina bifida & died

at age of 1 year
Abortions ; negative
Still births; negative
Mother's age , occupation; 28 yrs, house wife
Father's age & occupation; 30 years , free worker
Degree of kinship ; not relatives

(CASE34)

DOB ; 21-12-2012
Address; Halabsa
Birth order & condition of other siblings ; 8th , 5 normal alive siblings , & 2 died (1 at age of 10 days due to CHD , & the other at age of 20 days due to sepsis)
DX; small to moderate ASD , small midmuscular VSD
Type of delivery ; Cs
Pregnancy history ; APH
Family history of this or other anomaly ; his cousin from mother side aged 3 yrs have VSD
Abortions ; negative
Still births ; negative
Mother's age, occupation; 40 yrs, house wif
Father's age & occupation ; 43 yrs, free worker
Degree of kinship ; 2nd degree relatives



(CASE35)

Dob; 27-10-2012

Address; Fallujah – Alwahda district

Type of anomaly; Cornelia Delange syndrome

Birth order & condition of other siblings; 2nd , normal 1st baby

Pregnancy history; normal

Type of delivery; NVD

Abortions; negative

Stillbirths; negative

Family history of anomalies; She have 1 cousin with short stature (GH deficiency)

Mother ; 27 yrs , primary school teacher

Father;29 yrs , governmental employee

Degree of kinship; not relatives

(CASE36)

DOB ; 24-11-2012

Address; Saglaweya

Birth order & condition of other siblings ; 2nd , 1 normal older sibling . her twin have ASD & PDA

DX; ASD

Type of delivery ; NVD , twin

Pregnancy history ; Normal

Family history of this or other anomaly ; her 23 yrs old sister (from 1st wife) is acase of CP

Abortions ; negative

Still births ; negative

Mother's age , occupation; 22 yrs , house wife

Father's age & occupation ; 44 yrs, free worker

Degree of kinship ; not relatives

(CASE37)

DOB ; 18-12-2012

Address; Garmah

Birth order & condition of other siblings ; 10th , 5 alive siblings , 2 yrs old male sibling have ASD , female sibling also have CHD , 18 yrs old , married . 2died , asister died in 2006 at age of 1.2 yrs due to TOF , & another sister born in 2008 with Anencephaly & died at birth

DX; ASD , VSD, Ps

Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; her aunt also have CHD
Abortions ; negative
Still births ; negative
Mother's age , occupation; 39 yrs , house wife
Father's age & occupation ; 44 yrs , free worker
Degree of kinship ; not relatives

(CASE38)

DOB ; stillbirth , 10-12-2012
Address; Ehsai
Birth order & condition of other siblings ; 2nd , normal 1st baby
DX; Abnormal upper limb
Type of delivery ; NVD , 6 mo. pregnancy
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 22 yrs
Father's age & occupation ;
Degree of kinship ;

(CASE39)

DOB ; 20-12-2012
Address; Fallujah- Jbail
Birth order & condition of other siblings ; 6th , normal 5 siblings
DX; Cleft lip & palate
Type of delivery ; NVD
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; 1
Still births ; negative
Mother's age , occupation; 33 yrs , house wife
Father's age & occupation; 32 yrs , free worker
Degree of kinship ; 2nd degree relatives

(CASE40)

DOB ; stillbirth 21-12-2012

Address; Garmah

Birth order & condition of other siblings ; 2nd , the 1st pregnancy aborted at 20 wks , also male

DX; Dysmorphic features , short neck , abnormal genital organs , sloughed skin

Type of delivery ; CS

Pregnancy history ; normal pregnancy

Family history of this or other anomaly ; negative

Abortions ; 1

Still births ; only this one

Mother's age , occupation; 35 yrs , house wife

Father's age & occupation ; 35 yrs , free worker

Degree of kinship ; cousins



(CASE41)

DOB ; 13-12-2012

Address; Alshuhada'a district

Birth order & condition of other siblings ; 6th , normal 5 siblings

DX; Diaphragmatic hernia

Type of delivery ; Cs

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; 1

Still births ; negative

Mother's age, occupation; 30 yrs , house wife

Father's age & occupation ; 30 yrs , free worker

Degree of kinship ; not relatives

(CASE42)

Dob; 15-12-2012

Address; Saglaweya

Type of anomaly; Hydrocephaly , spina bifida , spina bifida + meningocele

Birth order & condition of other siblings; 2nd

Pregnancy history; normal

Type of delivery; CS

Abortions; negative

Stillbirths; negative

Family history of anomalies; negative

Mother ; 18 yrs ? , house wife

Father; 25 yrs , free worker

Degree of kinship; 2nd degree



(CASE43)

DOB ; 26-12-2012

Address; Halabsah-Hsai

Birth order & condition of other siblings ; 6th , 3 alive , 1 male sibng died at age of 1 month about 4 yrs ago with the same anomaly , & female died at age of 10 days with sepsis 6 yrs ago

DX; Werding Hoffman disease

Type of delivery ; CS , single
Pregnancy history ; normal
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age , occupation; 27 yrs , house wife
Father's age & occupation ; 30 yrs , police man
Degree of kinship ; 3rd degree (their parents are cousins)

(CASE44)

Dob; 26-11-2012
Address; Fallujah
Type of anomaly; Moderate ASD secundum , severe TR , Rv function is depressed
Birth order & condition of other siblings; 2nd , normal 1st baby
Pregnancy history; normal
Type of delivery; NVD
Abortions; negative
Stillbirths; negative
Family history of anomalies; negative
Mother ; 25 yrs , house wife
Father; 40 yrs , free worker
Degree of kinship; negative

(CASE45)

DOB ; 16-12-2012
Address; Joolan district
Birth order & condition of other siblings ; 6th , 4 alive & 1 died
DX; CHD , VSD?
Type of delivery ; NVD
Pregnancy history ; APH
Family history of this or other anomaly ; negative
Abortions ; negative
Still births ; negative
Mother's age, occupation; 31 yrs , house wife
Father's age & occupation; 42 yrs , free worker
Degree of kinship ; not relatives

(CASE46)

DOB ; 2006

Address; Habbaneya

Birth order & condition of other siblings ; 2nd , one normal older & younger sibling

DX; MVP

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; negative

Still births ; negative

Mother's age , occupation; 30 yrs, house wife

Father's age & occupation ; 33 yrs, free worker

Degree of kinship ; 2nd degree

(CASE47)

DOB ; 12-8-2012

Address; Garmah

Birth order & condition of other siblings ; 3rd

DX; moderate size PDA + PH + fenestrated IAS

Type of delivery ; NVD

Pregnancy history ; normal

Family history of this or other anomaly ; negative

Abortions ; negative

Still births ; negative

Mother's age , occupation; 21 yrs, house wife

Father's age & occupation ; 30 years , free worker

Degree of kinship ; 1st degree relatives