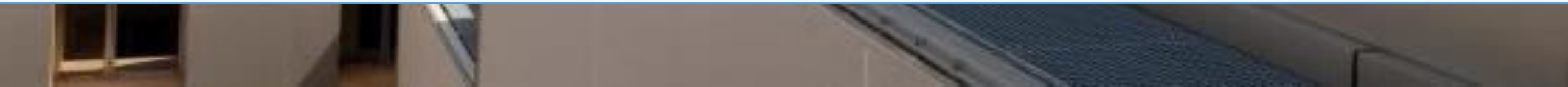
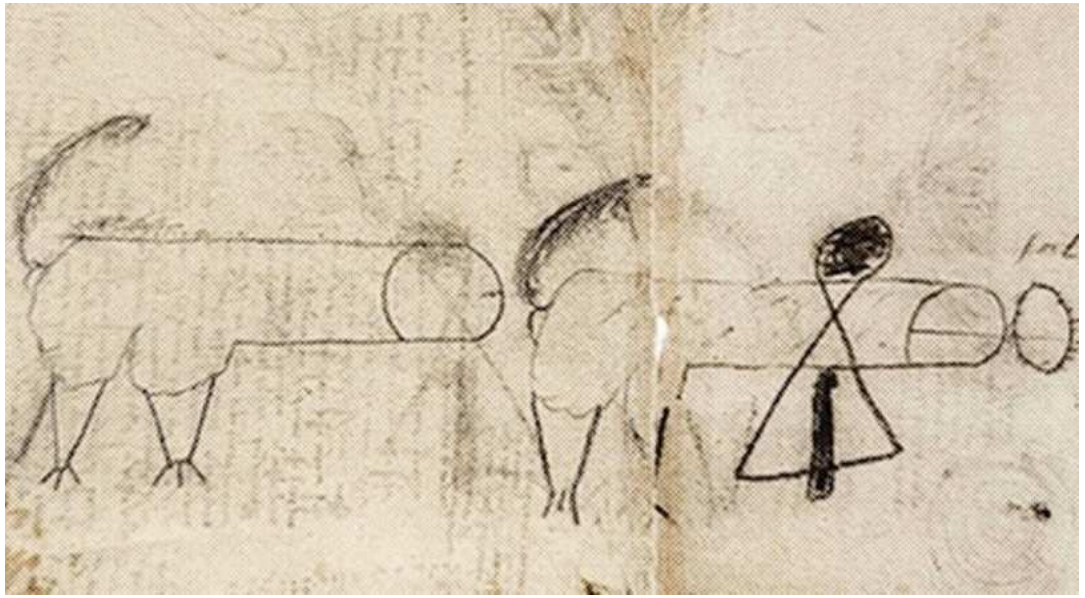
XXXIII REUNION

SOCIEDAD DE OBSTETRICIA Y GINECOLOGIA DE LA REGION DE MURCIA

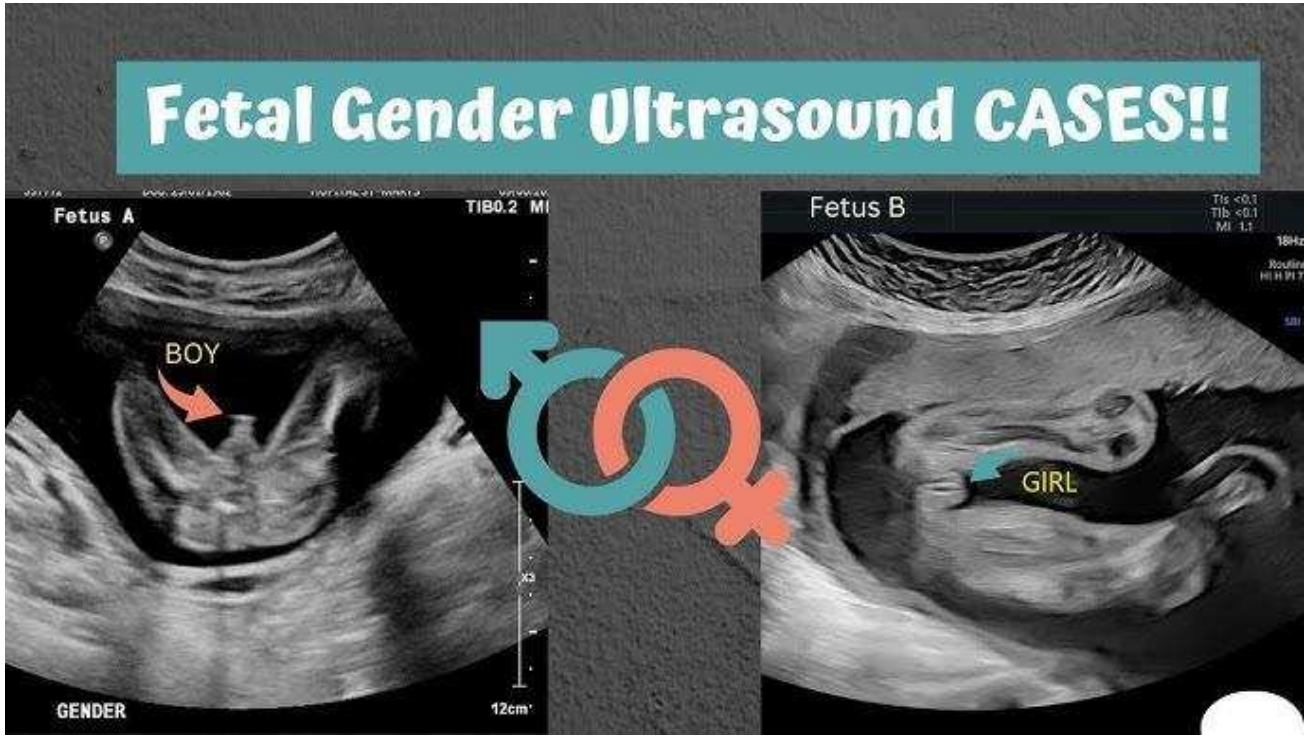
ANOMALÍAS DEL DESARROLLO SEXUAL (ADS)

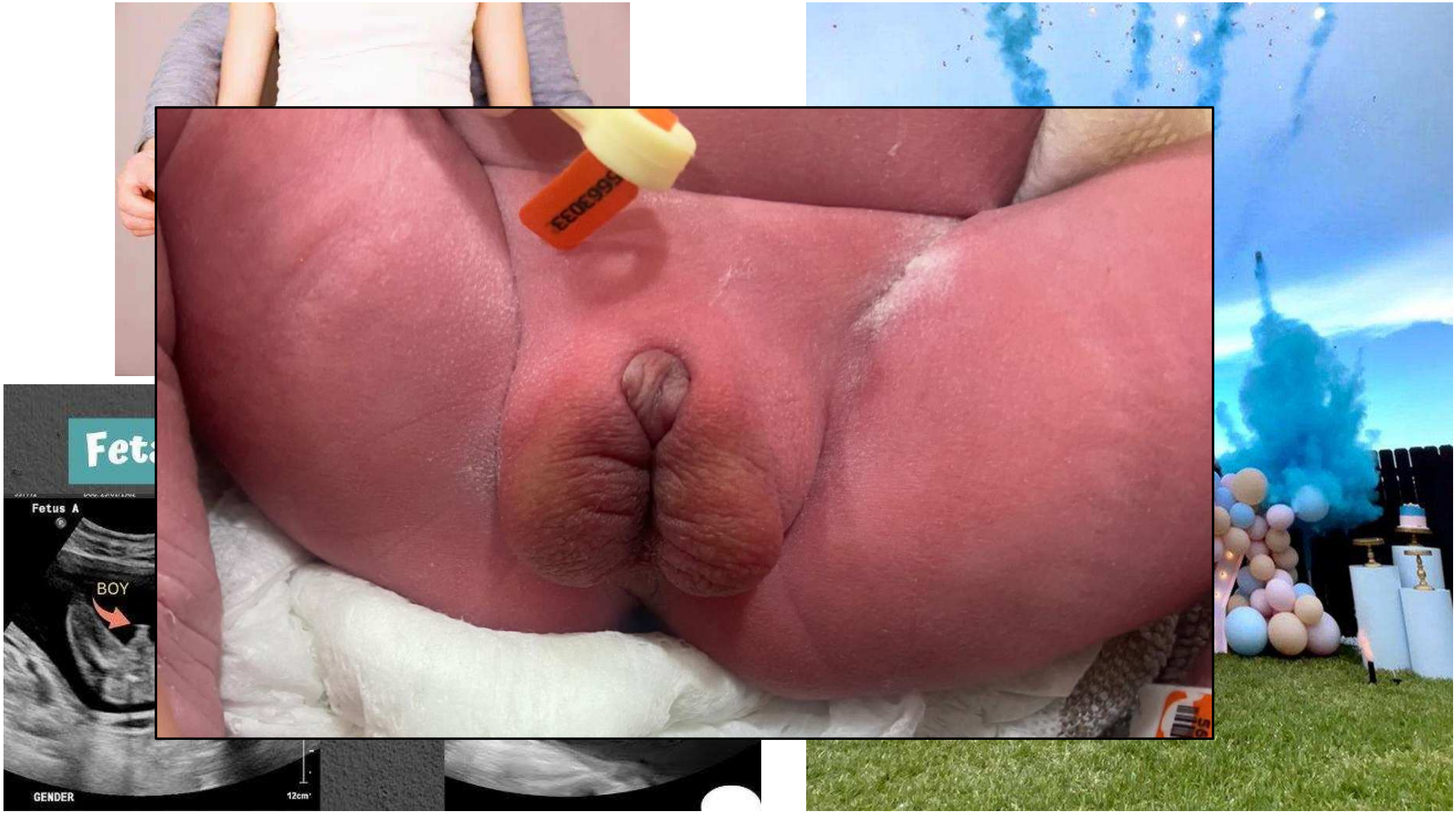
DIAGNÓSTICO PRE Y POSTNATAL






Girl
Boy


Fetal Gender Ultrasound CASES!!
Fetus A
TIB0.2 MI
BOY
GENDER
12cm
Fetus B
GIRL


Fetus A
BOY
GENDER
12cm

Anomalías genitales

"Alteraciones en la estructura o el desarrollo normal de los órganos sexuales"

LARSEN 2020

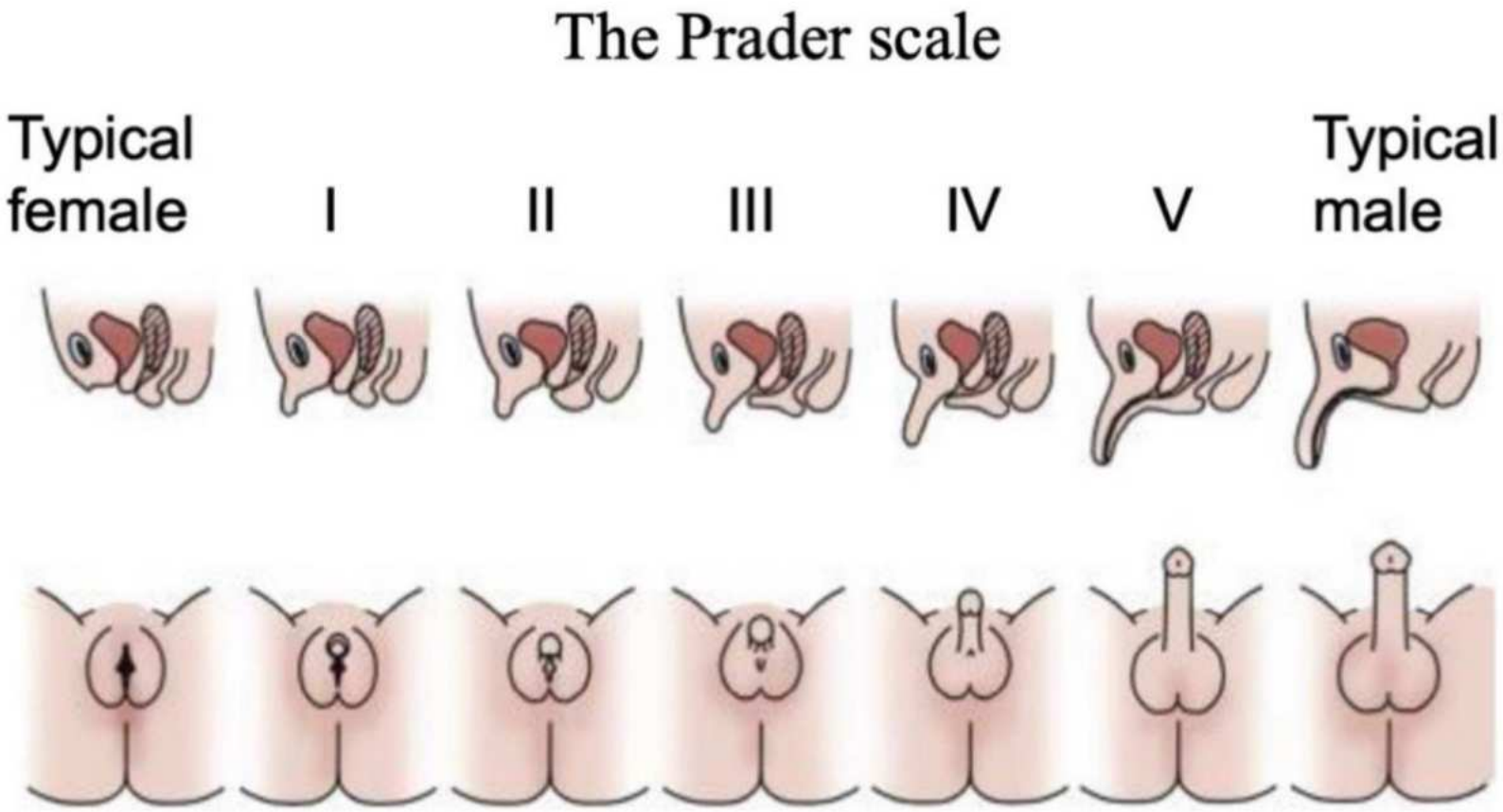
SINA 2019

Genitales ambiguos

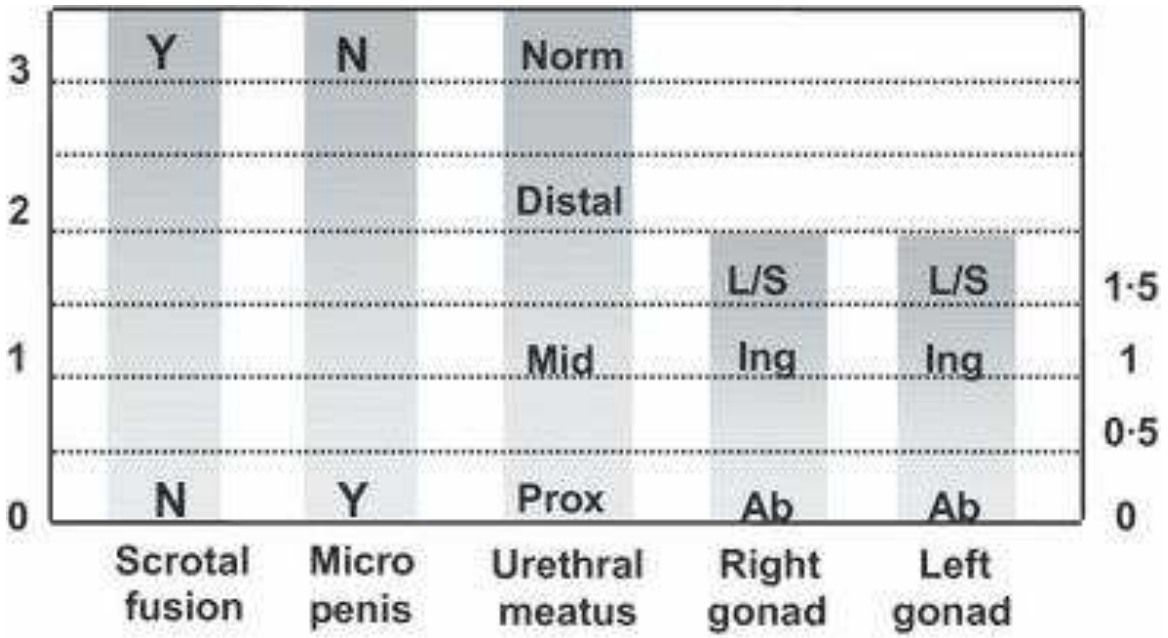
"Cualquier **recién nacido** cuya **apariencia genital** haga que el médico de la sala de partos **cuestione la asignación de sexo**"

GONZALEZ 2006

Genitales típicos/atípicos



Genitales típicos/atípicos



External Masculinization Score (EMS)

EGS	Labioscrotal Fusion	Genital Tubercle(GT) Length (mm)	Urethral Meatus	Right Gonad	Left Gonad
3	Fused	>31	Top of the GT		
2.5		26-30	Coronal Glandular		
2			Along the GT		
1.5	Posterior Fusion	21-25	At the GT base	Labioscrotal	Labioscrotal
1		10-20	Labioscrotal	Inguino-Labioscrotal	Inguino-Labioscrotal
0.5				Inguinal	Inguinal
0	Unfused	<10	Perinuem	Impalpable	Impalpable

External Genitalia Score (EGS)

Disorder of Sex Development (DSD)

Anomalías del Desarrollo Sexual (ADS)

"Condición congénita en la cual el desarrollo del sexo cromosómico, gonadal o anatómico es atípico"

HUGHES 2005

Disorder … SD)

Anomalías c…

"Condición congé…
cromosómico,…

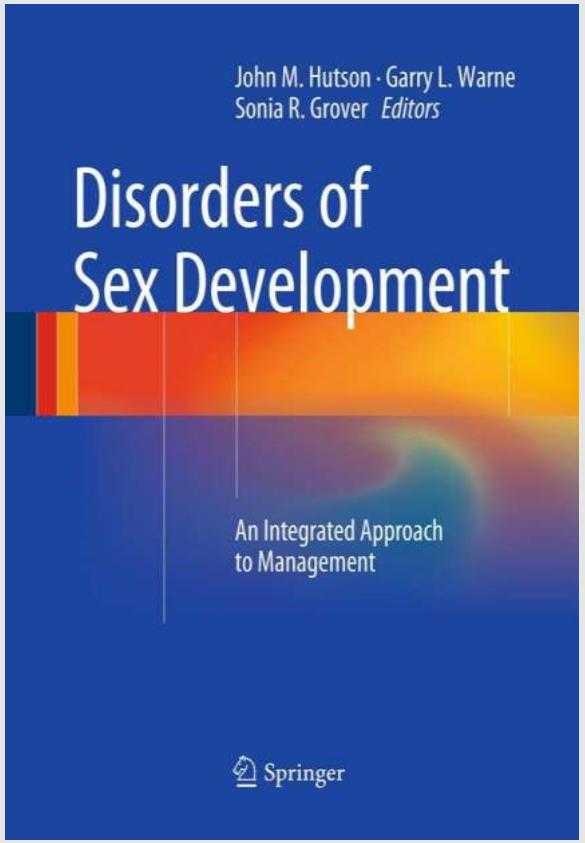
Sex chromosome DSD	46,XY DSD	46,XX DSD
A: 47,XXY (Klinefelter syndrome and variants) B: 45,X (Turner syndrome and variants) C: 45,X/46,XY (mixed gonadal dysgenesis) D: 46,XX/46,XY (chimerism)	A: Disorders of gonadal (testicular) development 1. Complete or partial gonadal dysgenesis (e.g. SRY, SOX9, SFl, WT1, DHH etc) 2. Ovotesticular DSD 3. Testis regression B: Disorders in androgen synthesis or action 1. Disorders of androgen synthesis a. LH receptor mutations b. Smith-Lemli-Opitz syndrome c. Steroidogenic acute regulatory protein mutations d. Cholesterol side-chain cleavage (CYP11A1) e. 3 β-hydroxysteroid dehydrogenase 2 (HSD3B2) f. 17 β-hydroxysteroid dehydrogenase (HSD17B3) g. 5 α-reductase 2 (SRD5A2) 2. Disorders of androgen action a. Androgen insensitivity syndrome b. Drugs and environmental modulators C: Other 1. Syndromic associations of male genital development (e.g. cloacal anomalies, Robinow, Aarskog, Hand-Foot-Genital, popliteal pterygium) 2. Persistent Müllerian duct syndrome 3. Vanishing testis syndrome 4. Isolated hypospadias (CXorf6) 5. Congenital hypogonadotropic hypogonadism 6. Cryptorchidism (INSL3, GREAT) 7. Environmental influences	A: Disorders of gonadal (ovarian) development 1. Gonadal dysgenesis 2. Ovotesticular DSD 3. Testicular DSD (e.g. SRY+, dup SOX9, RSP01) B: Androgen excess 1. Fetal a. 3 β-hydroxysteroid dehydrogenase 2 (HSD3B2) b. 21-hydroxylase (CYP21A2) c. P450 oxidoreductase (POR) d. 11 β-hydroxylase (CYP11B1) e. Glucocorticoid receptor mutations 2. Fetoplacental a. Aromatase deficiency (CYP19) b. Oxidoreductase deficiency (POR) 3. Maternal a. Maternal virilizing tumours (e.g. luteomas) b. androgenic drugs C: Other 1. Syndromic associations (e.g. cloacal anomalies) 2. Müllerian agenesis/hypoplasia (e.g. MURCS) 3. Uterine abnormalities (e.g. MODY5) 4. Vaginal atresis (e.g. KcKusick-Kaufman) 5. Labial adhesions

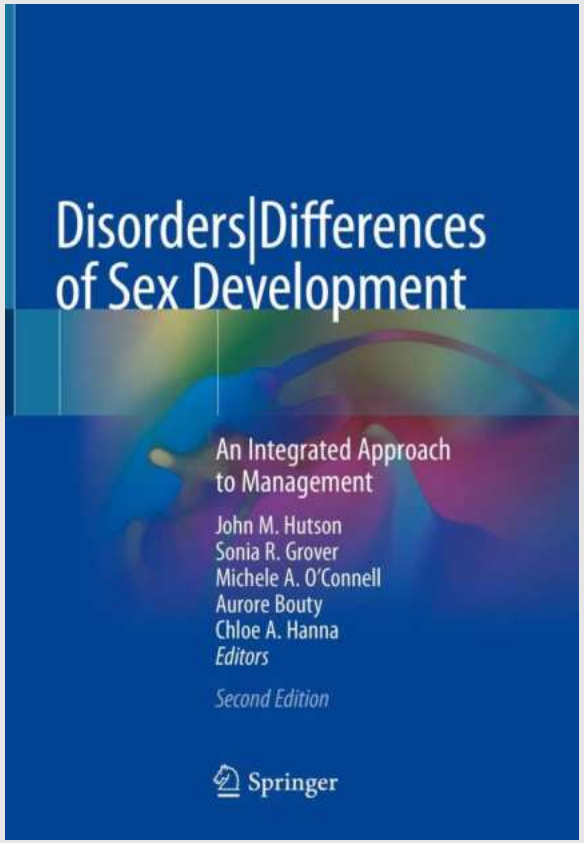
Difference of Sex Development (DSD)

Disorder of Sex Development (DSD)

Anomalías del Desarrollo Sexual (ADS)

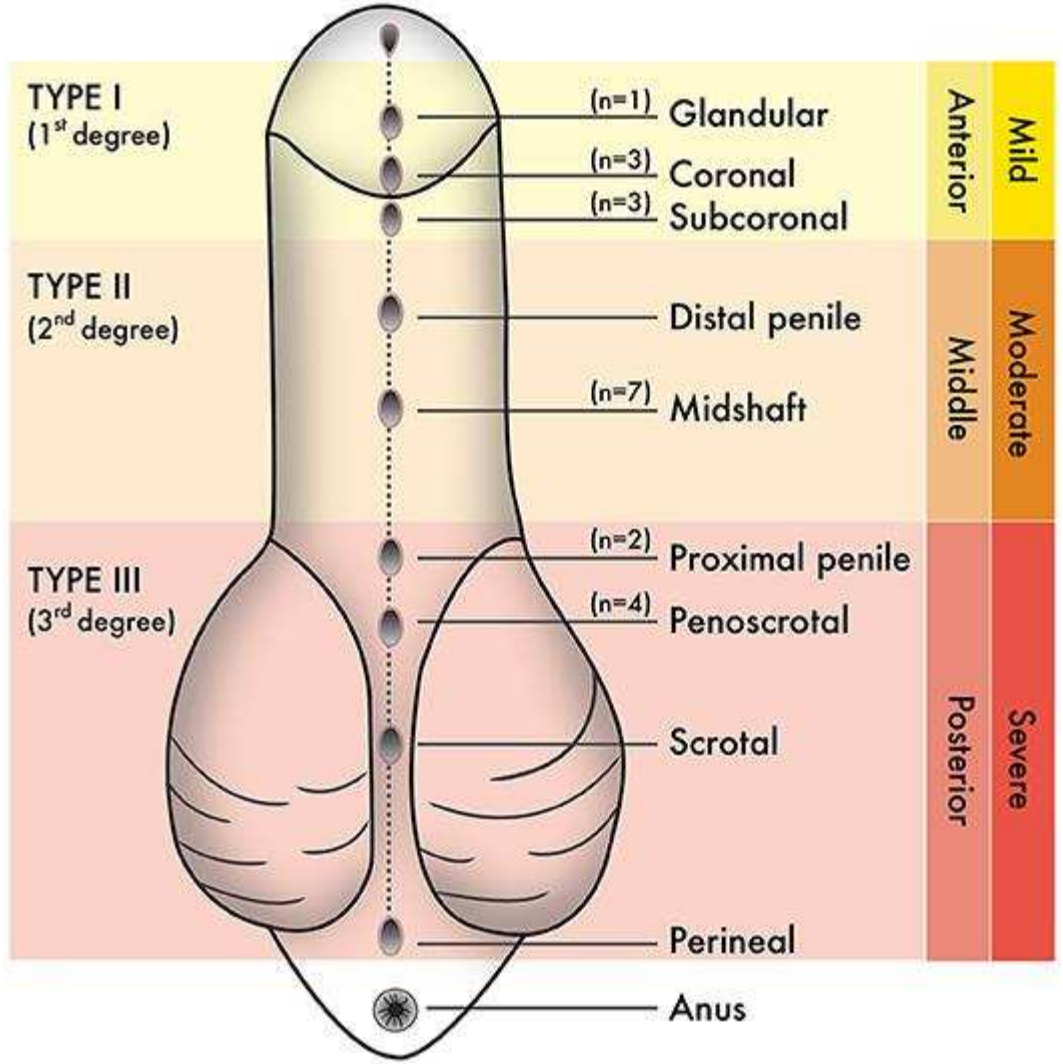
Desarrollo Sexual Diferente (DSD)

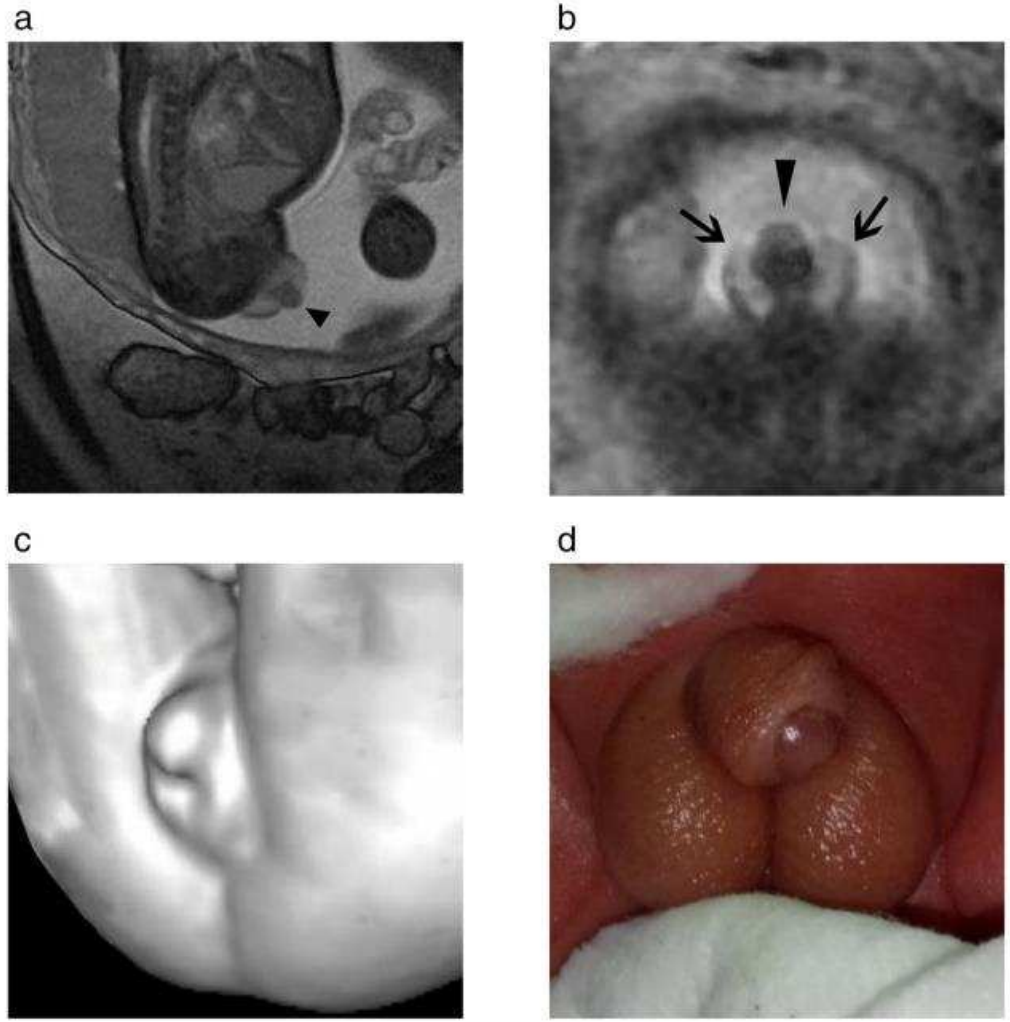




Anomalías del Desarrollo Sexual (ADS)

Hipospadias

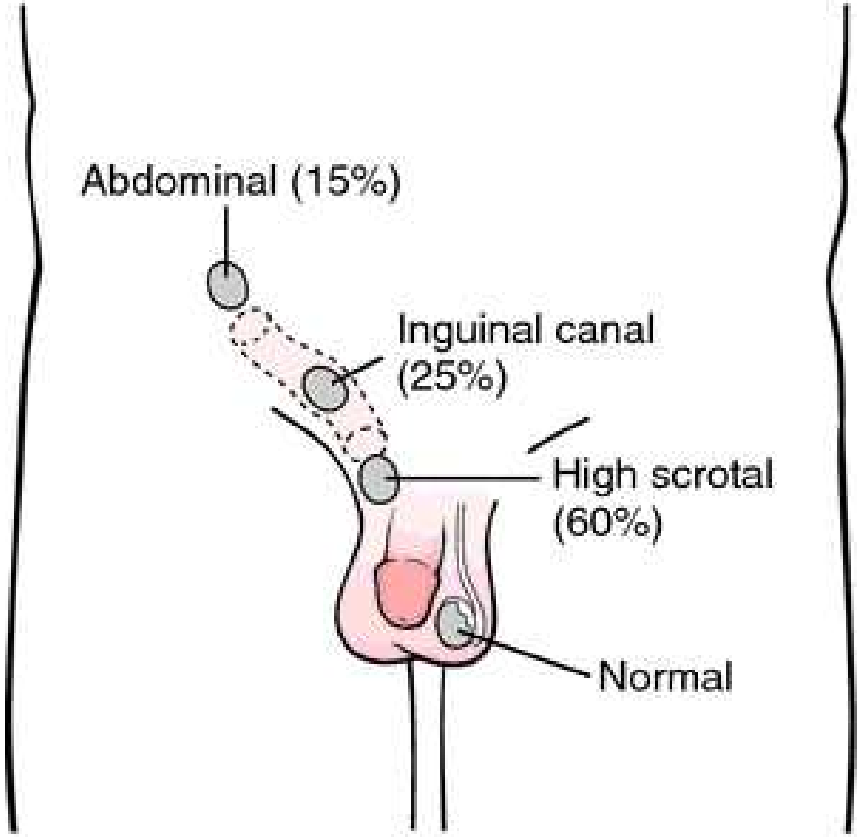


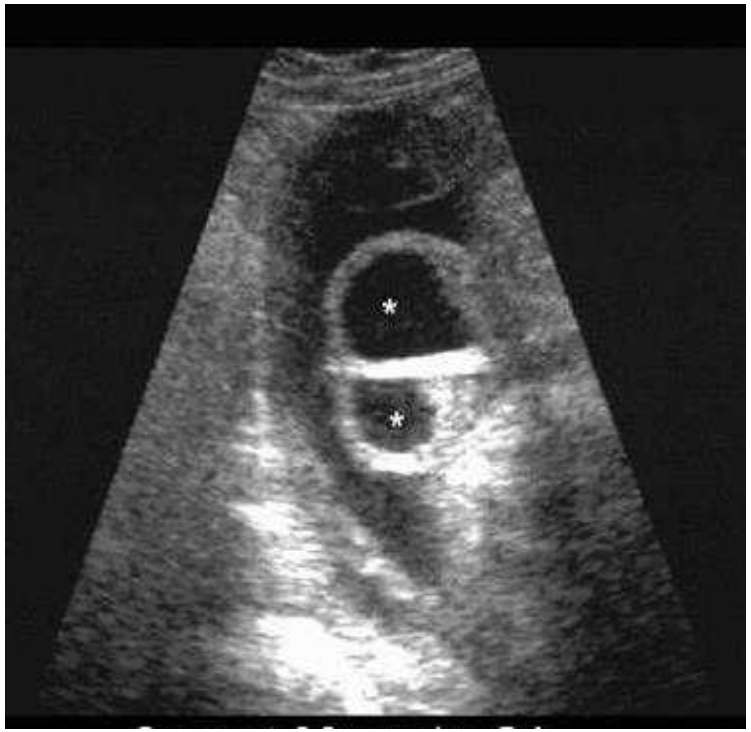


LI 2021

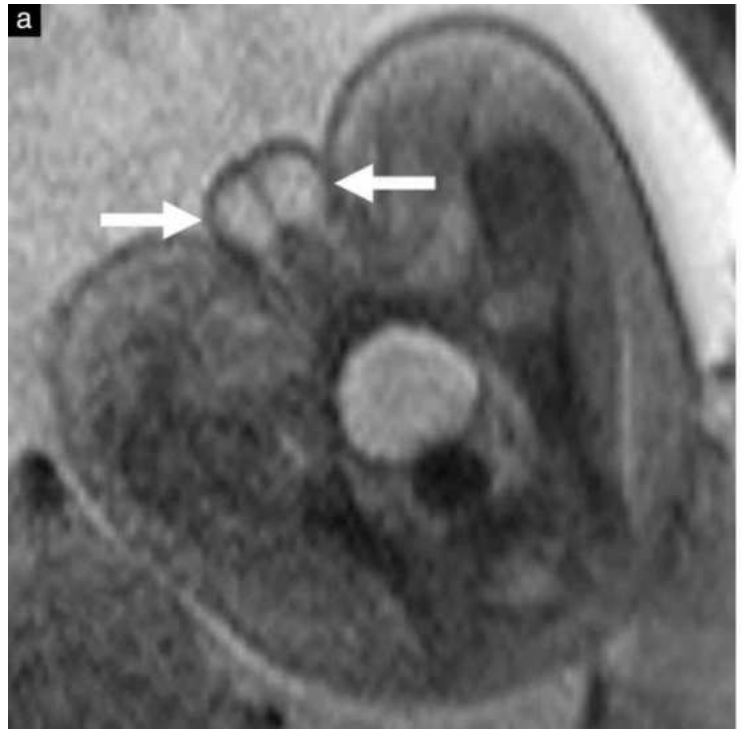
Anomalías del Desarrollo Sexual (ADS)

Criptorquidia





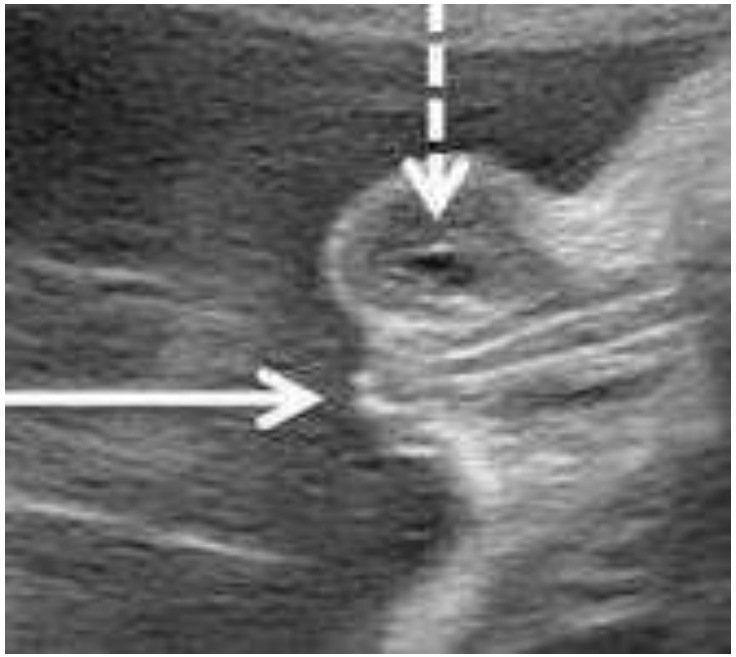
GRAHAMP 1996



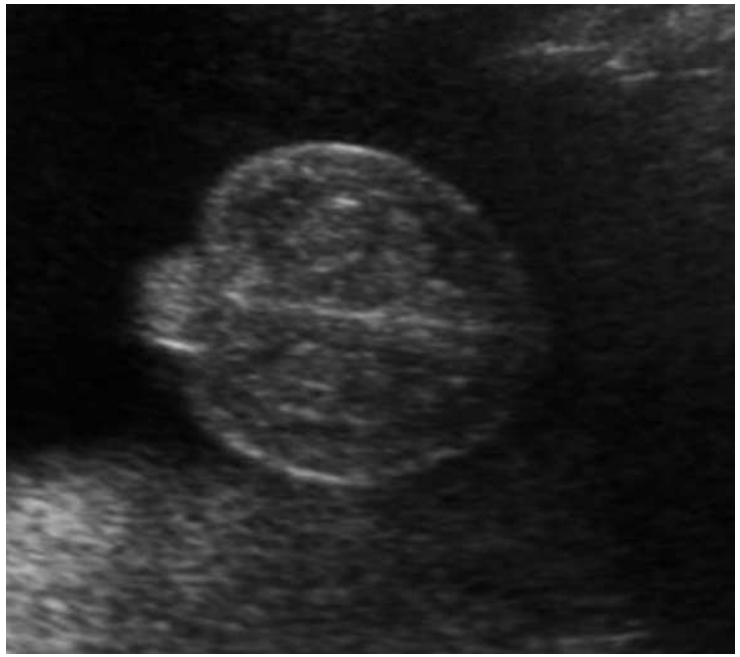
NEMEC 2021

Anomalías del Desarrollo Sexual (ADS)

Micropene



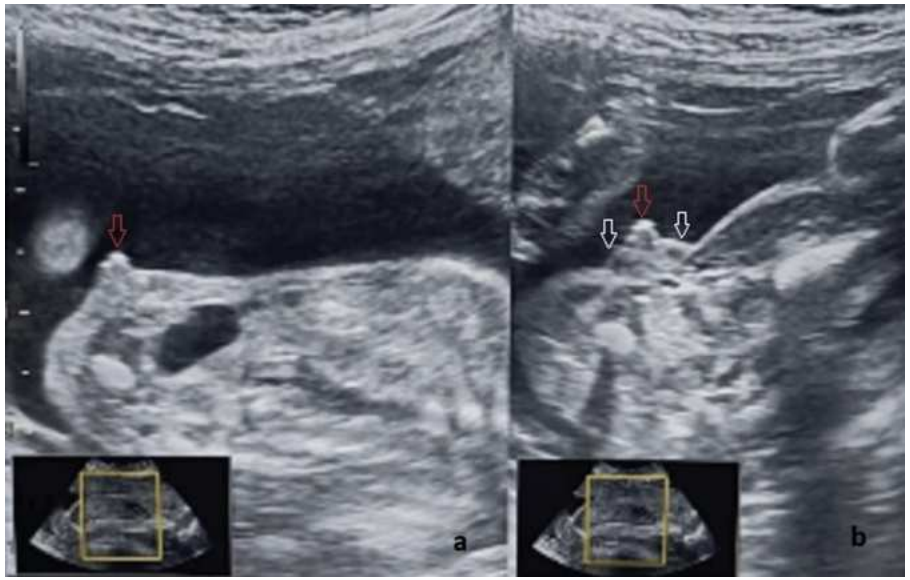
GAREL 2020

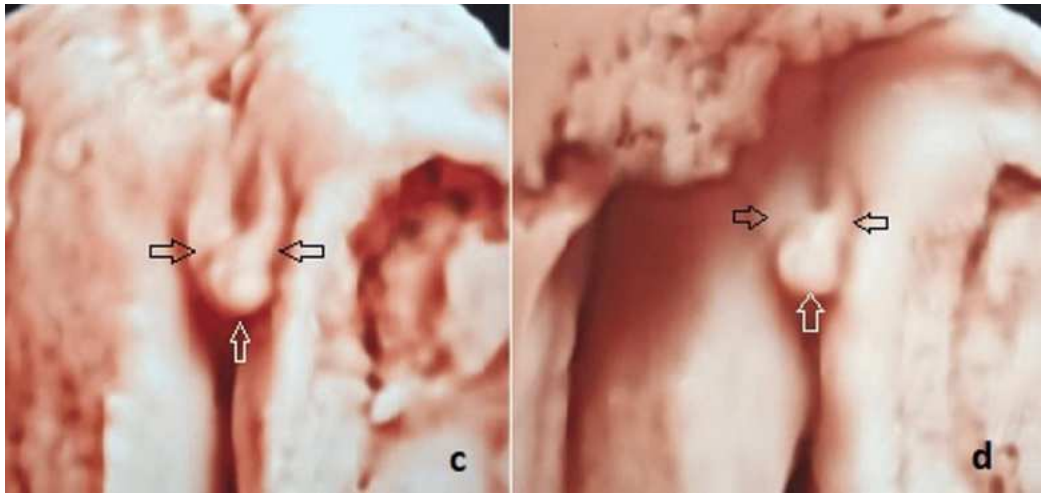


PAJKRT 2008

Anomalías del Desarrollo Sexual (ADS)

Clitoromegalia

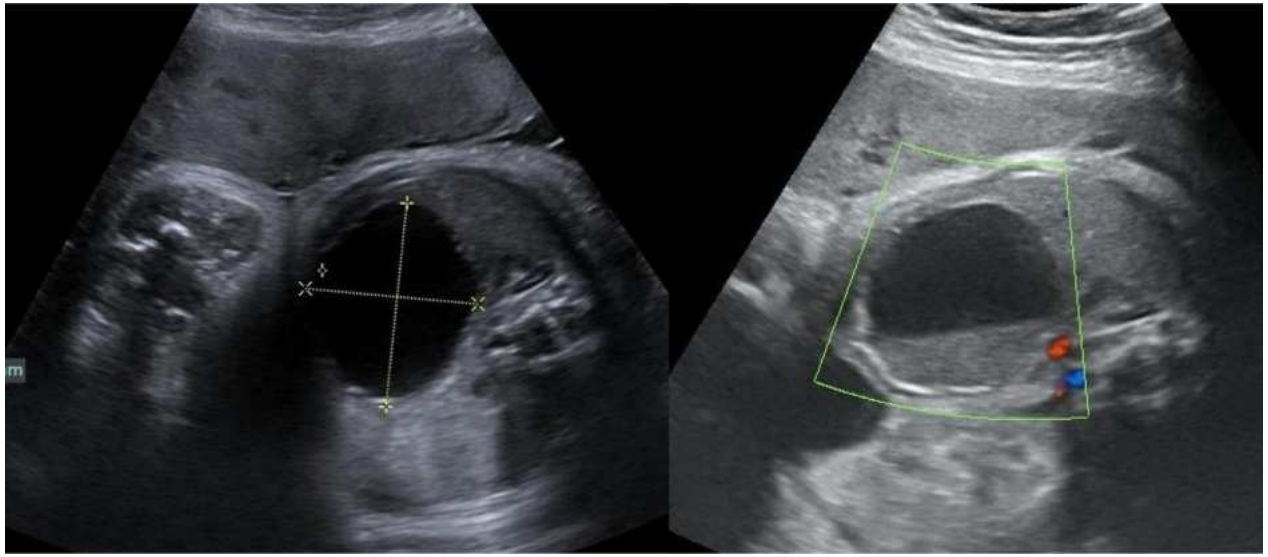




Anomalías del Desarrollo Sexual (ADS)

Quistes ováricos

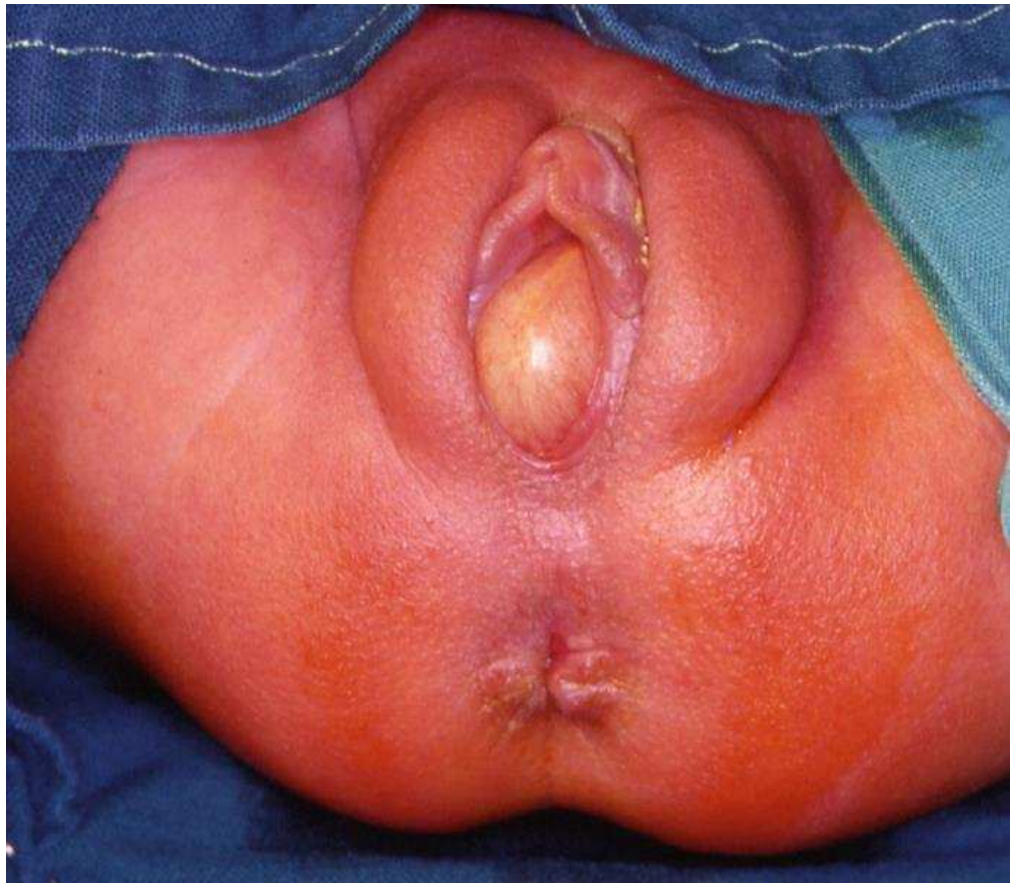
HARA 2021



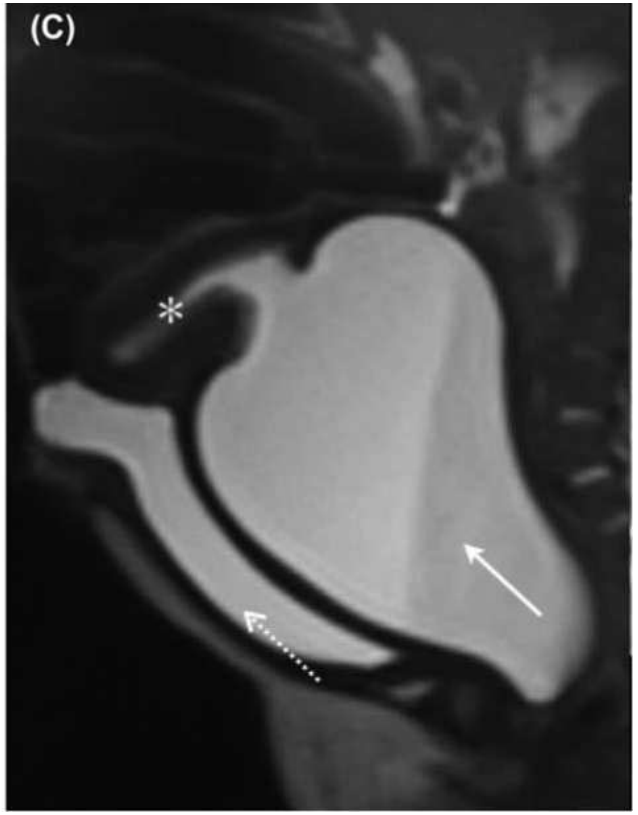
NITTA 2021

Anomalías del Desarrollo Sexual (ADS)

Hidro(metro)colpos



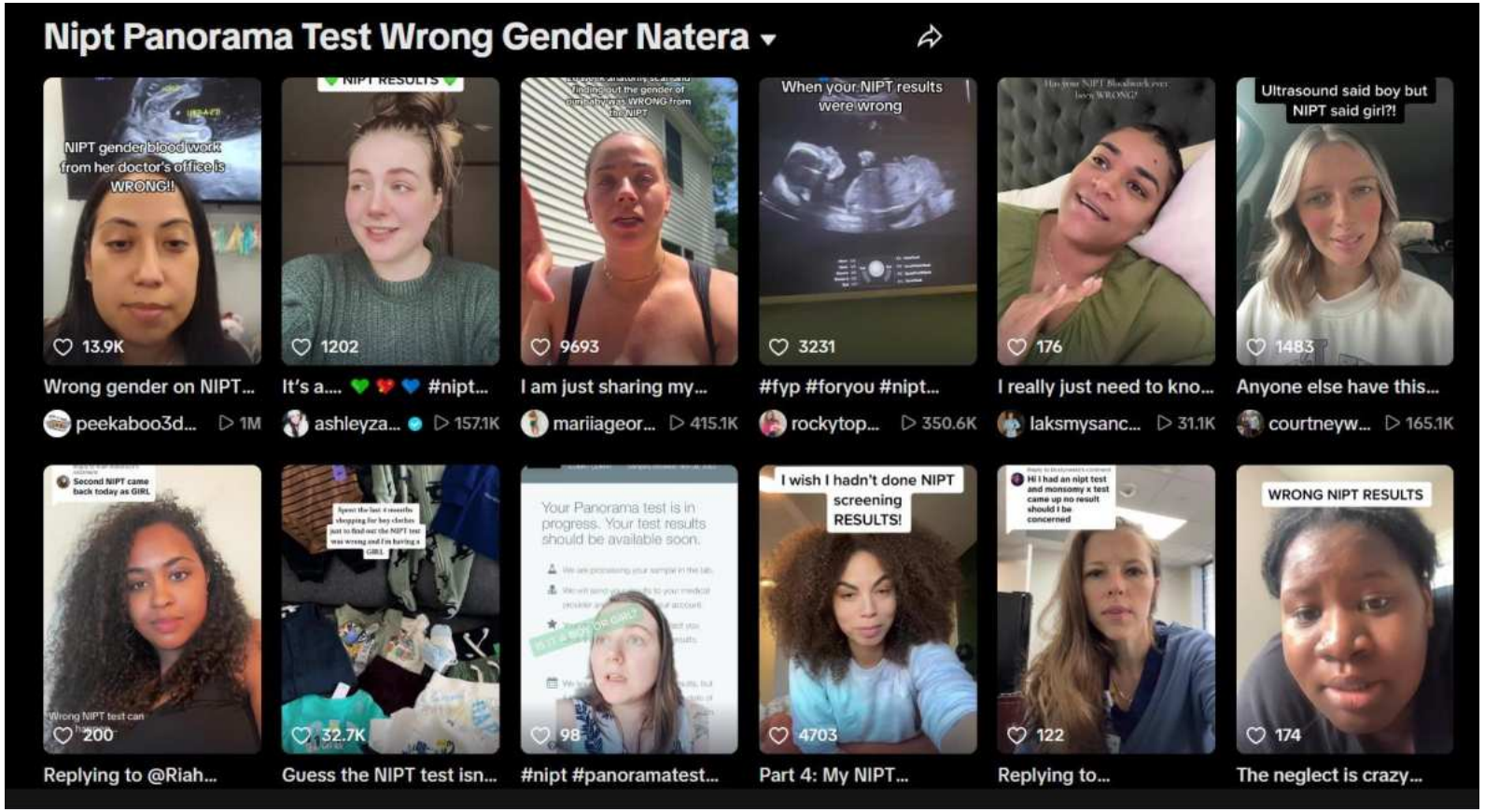
MALLMANN 2022

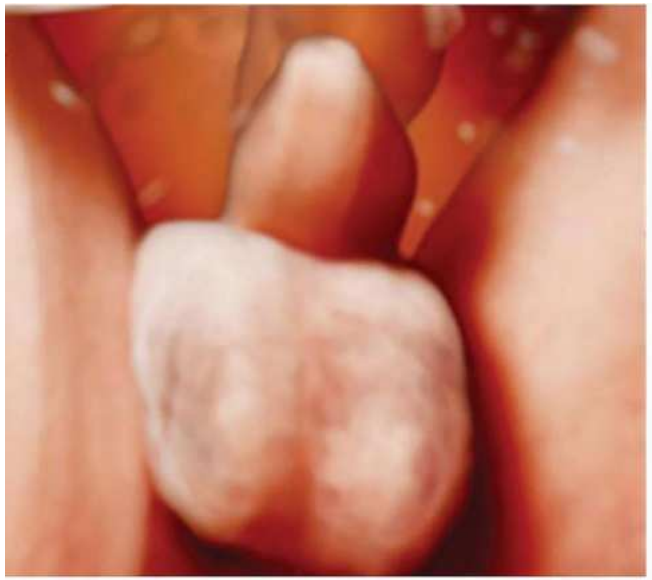


GARCIA RODRIGUEZ 2018

Anomalías del Desarrollo Sexual (ADS)

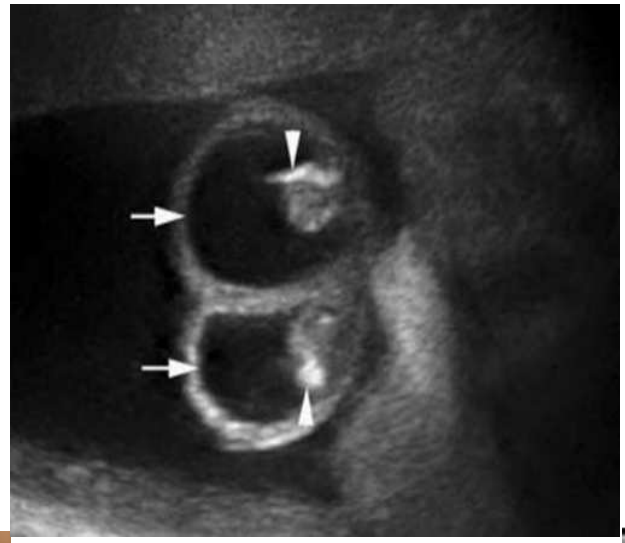
Discordancia de sexo fetal



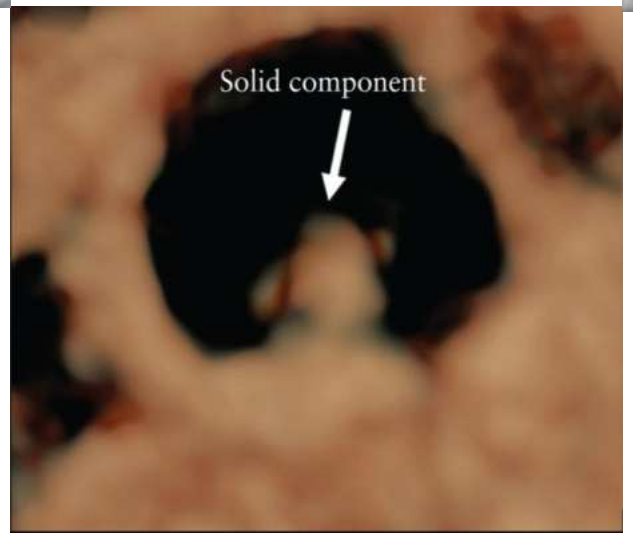


Anomalías del Desarrollo Sexual (ADS)

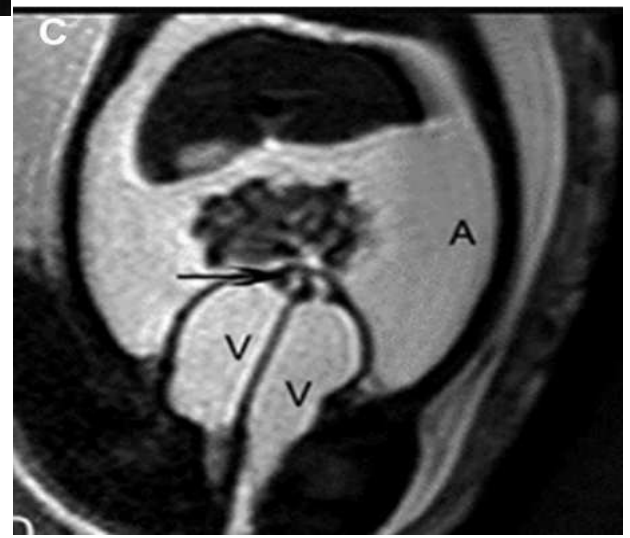
MIGLIORELLI 2018



WAX 2007



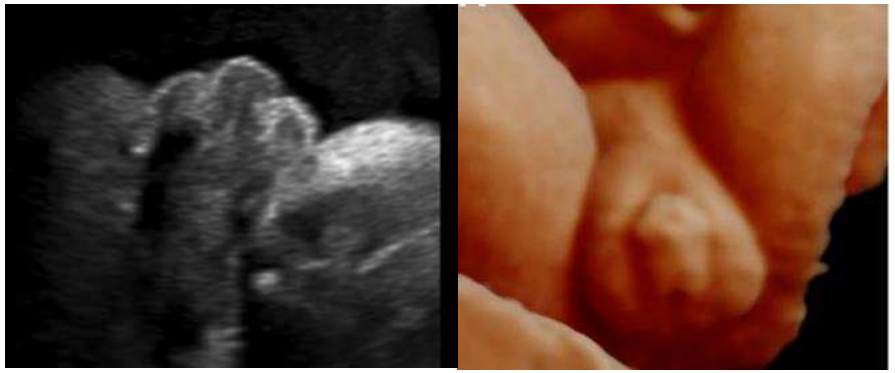
YOUSSEF 2016



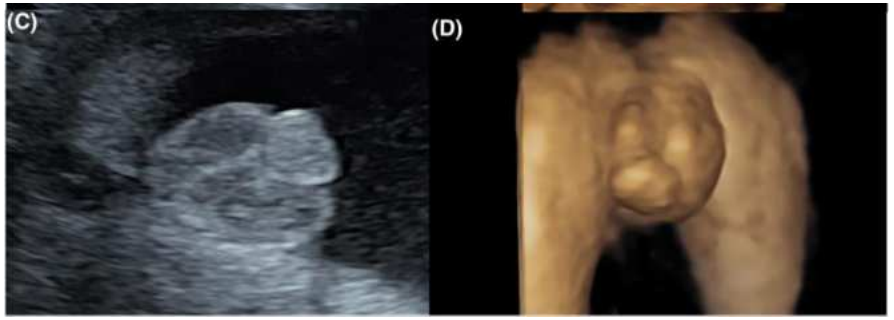
PHILLIPE 2012

Anomalías del Desarrollo Sexual (ADS)

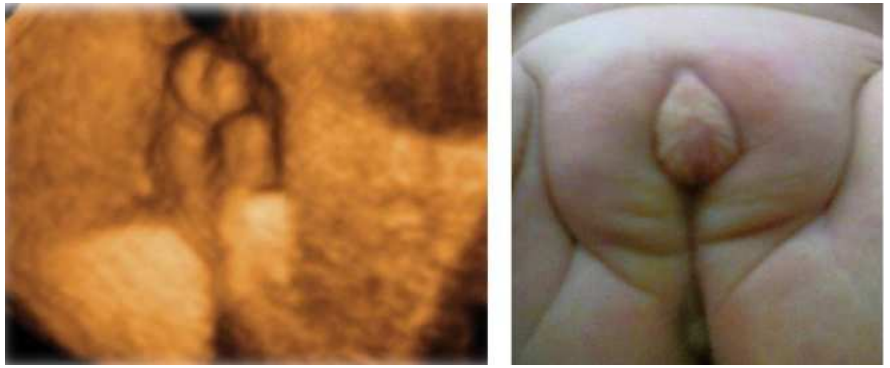
Genitales ambiguos



PIRES 2017



BEVER 2022



MAZZA 2013

Diagnóstico prenatal de ADS

¿Por qué seguimos sin detectarlas?

Falta de conocimiento

Falta de evidencia

Falta de apoyo

REDMAN 2007

Diagnóstico prenatal de ADS

¿Por qué seguimos sin detectarlas?

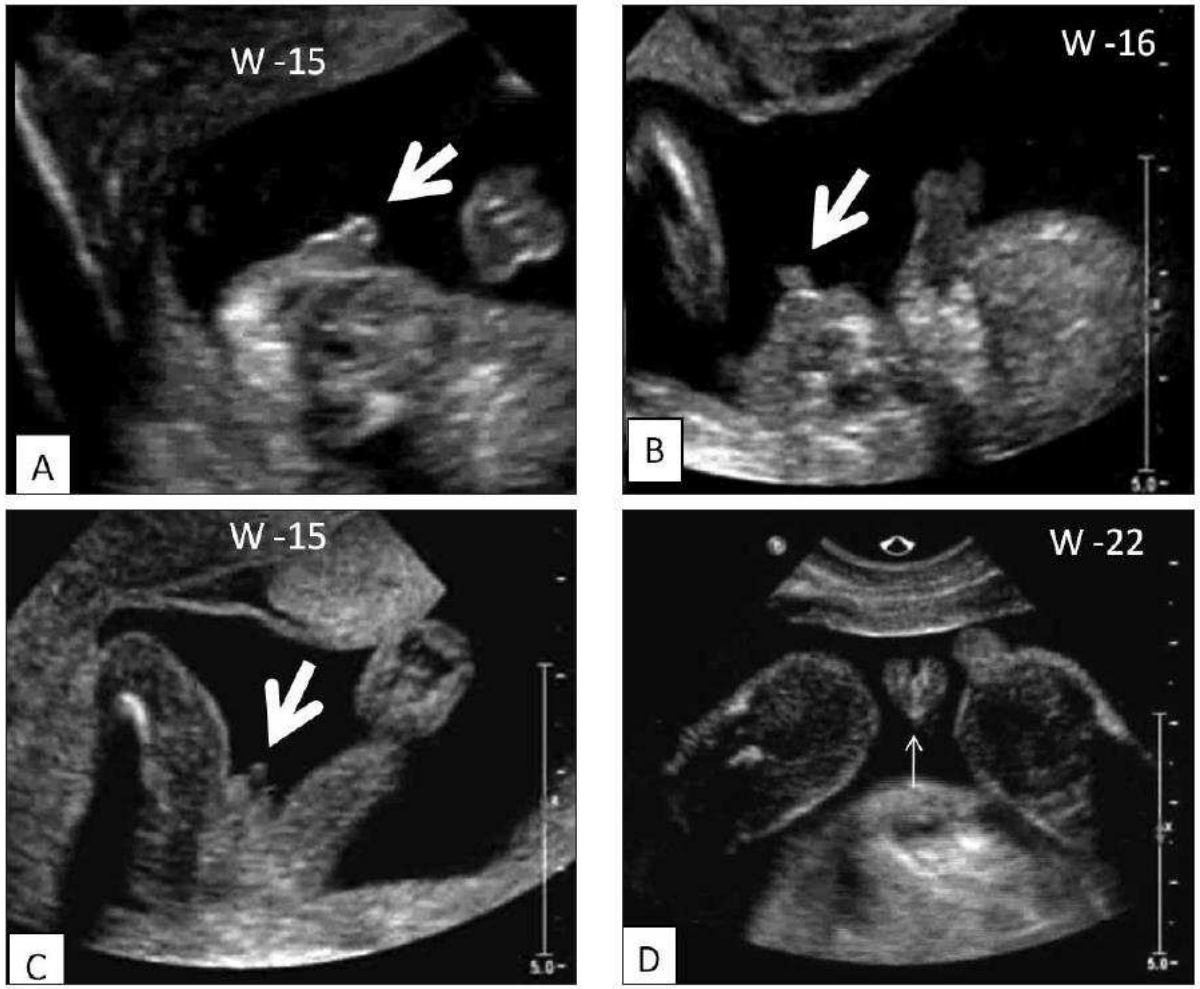
Falta de conocimiento

Falta de evidencia

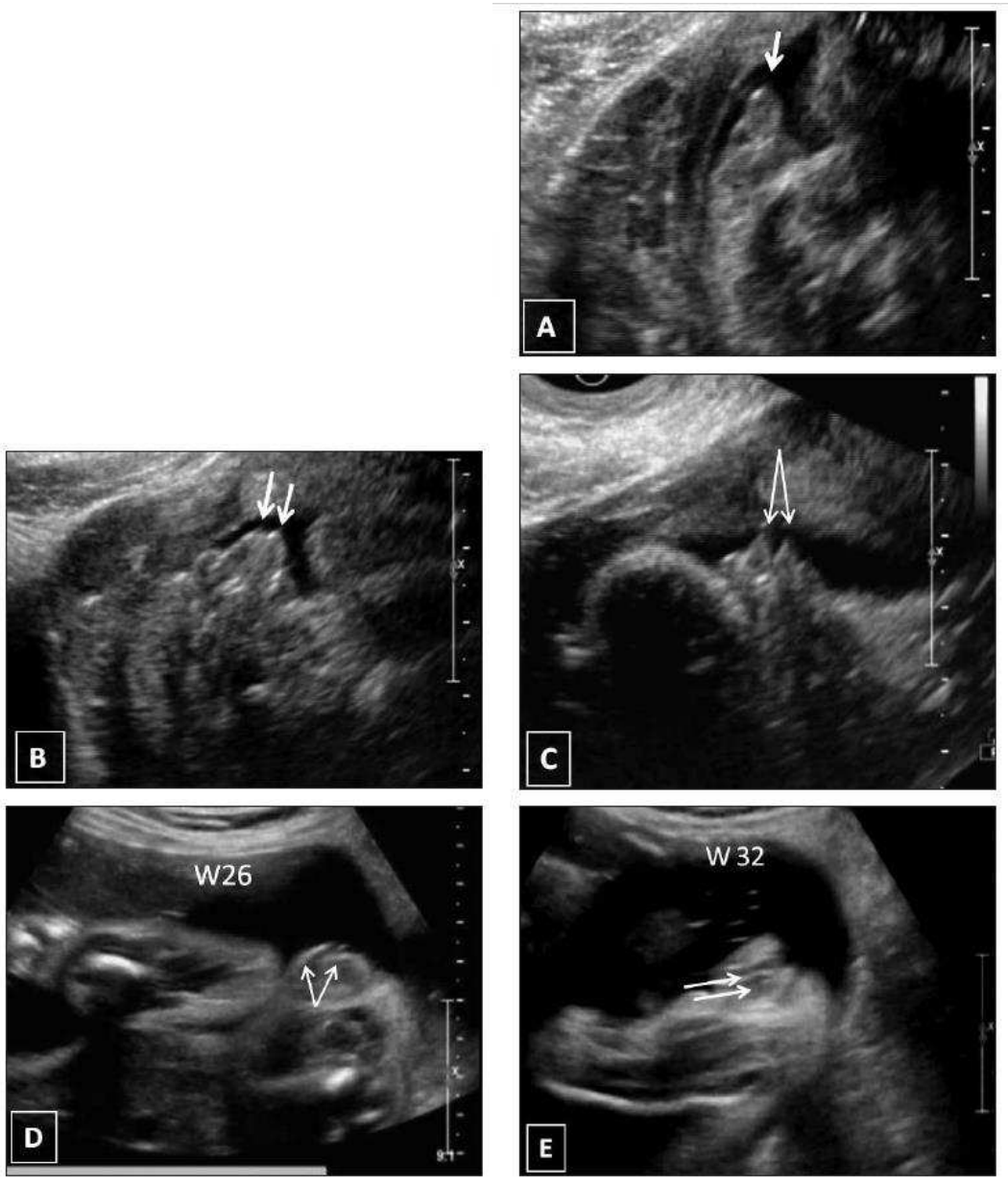
Falta de apoyo

Diagnóstico prenatal de ADS

Falta de conocimiento



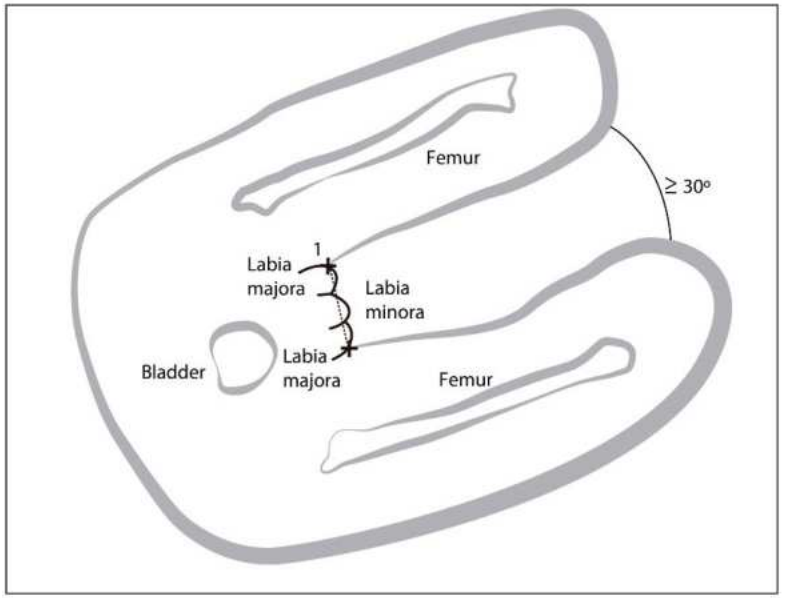
ZIMMER 2012



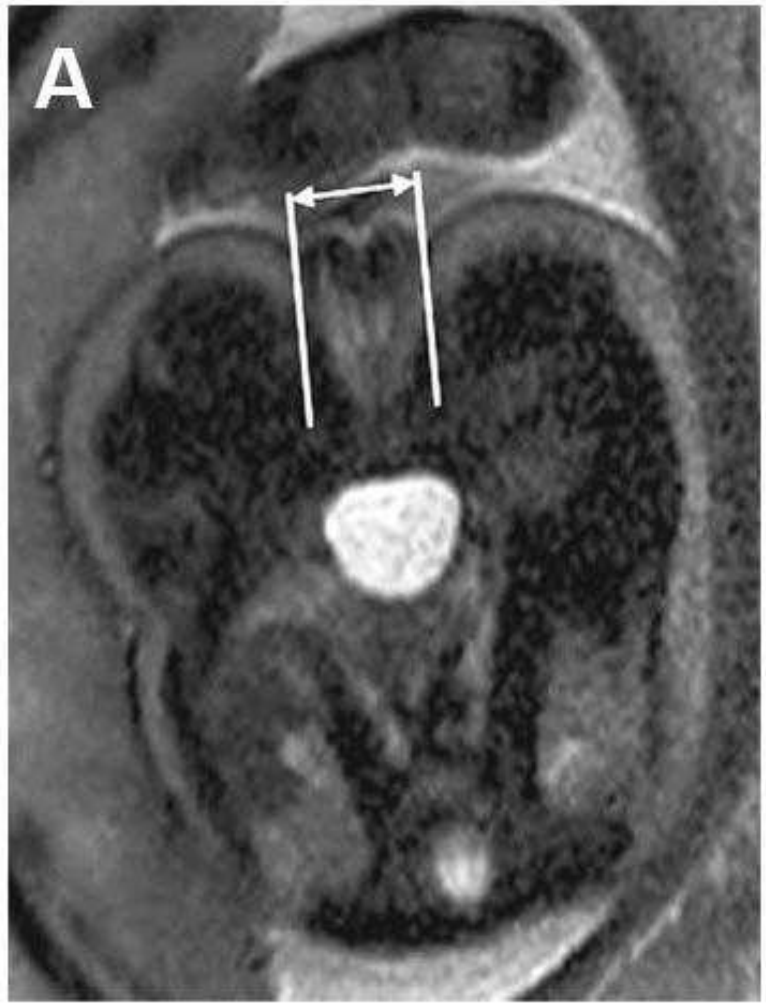
ZIMMER 2012

Diagnóstico prenatal de ADS

Falta de conocimiento



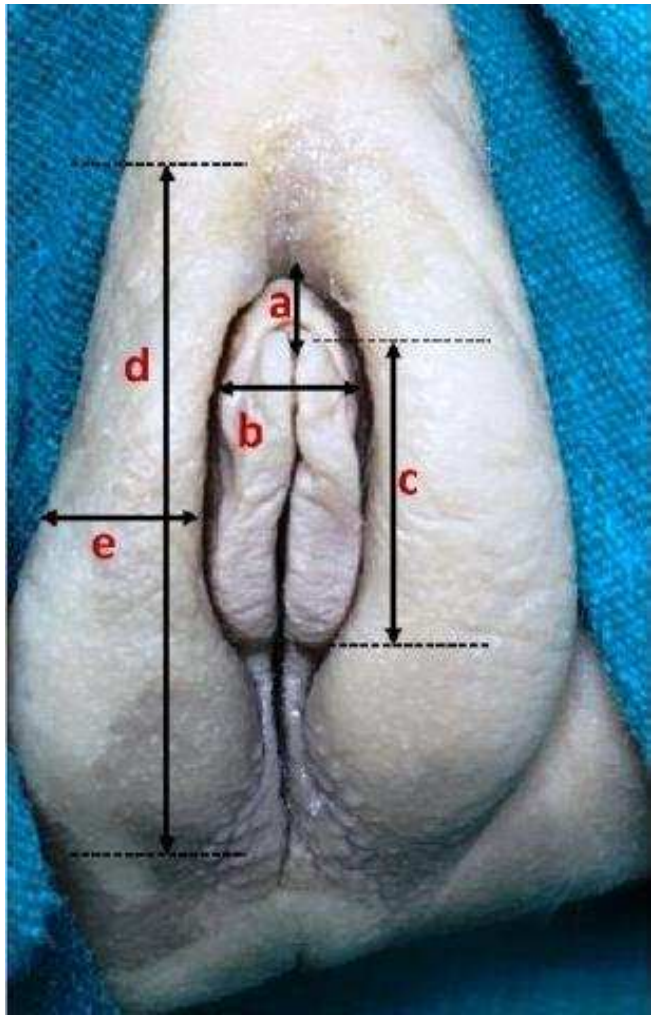
SOTO 2020



NEMEC 2012

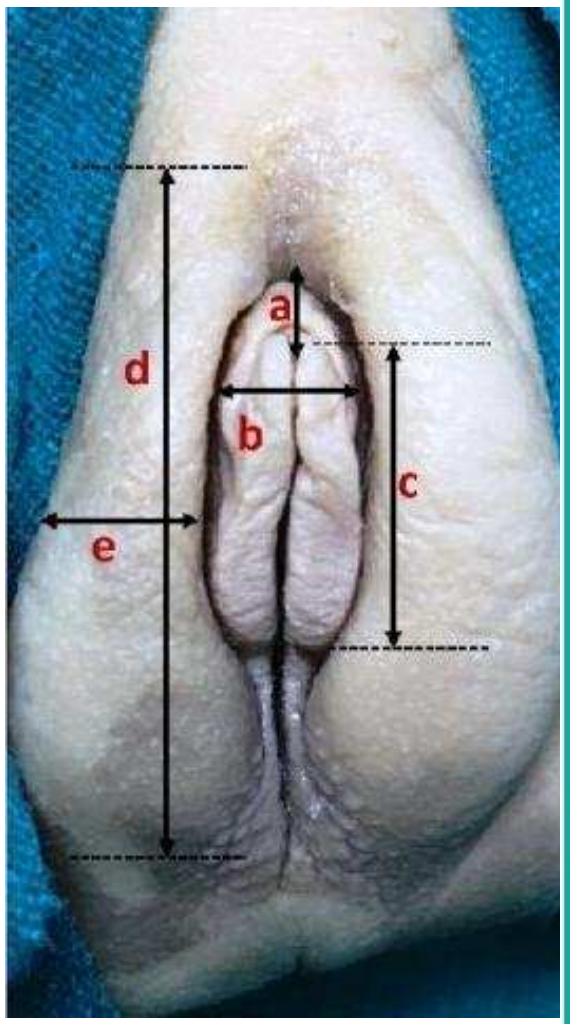
Diagnóstico prenatal de ADS

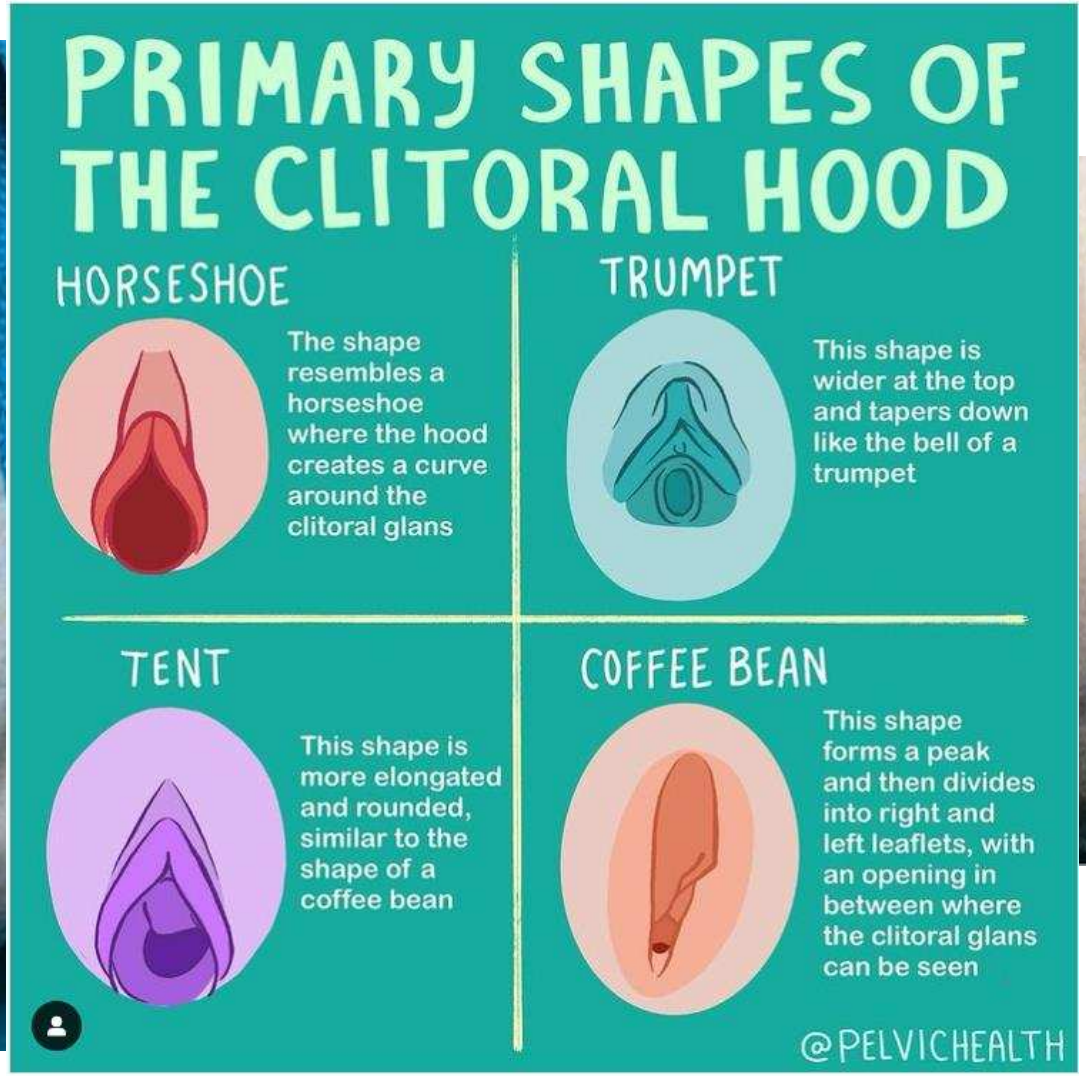
Falta de conocimiento



Diagnóstico prenatal de ADS

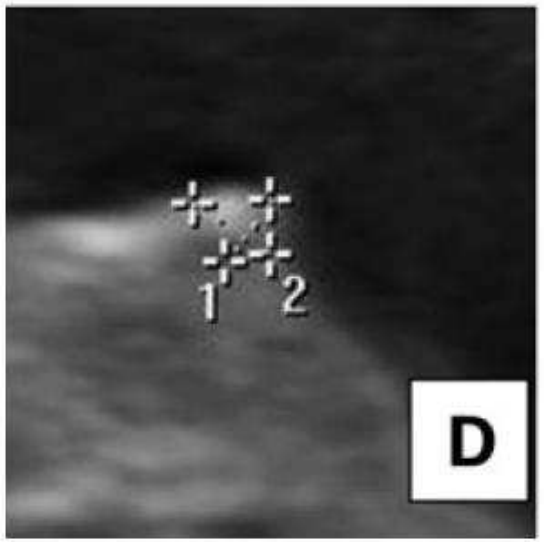
Falta de conocimiento

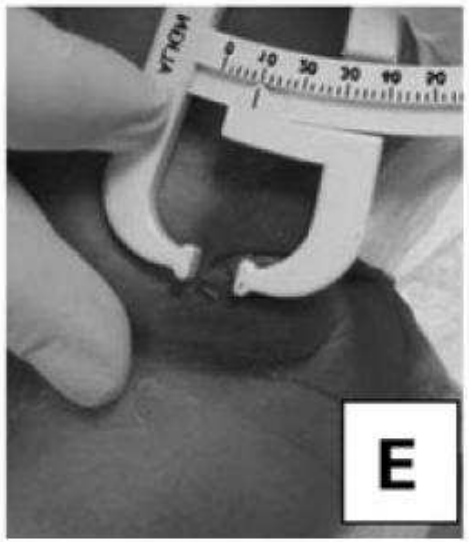


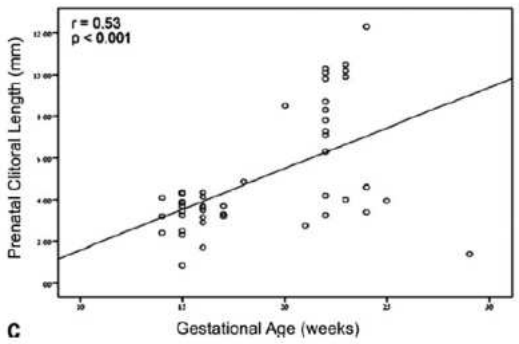


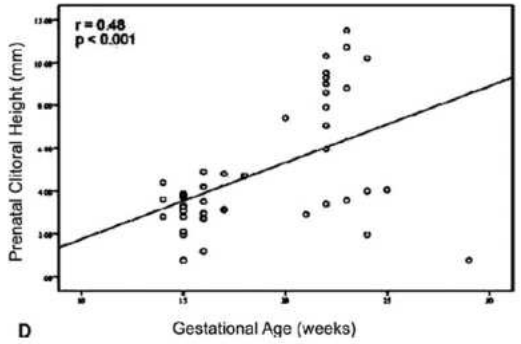
Diagnóstico prenatal de ADS

Falta de conocimiento









SHARONY 2012

Diagnóstico prenatal de ADS

¿Por qué seguimos sin detectarlas?

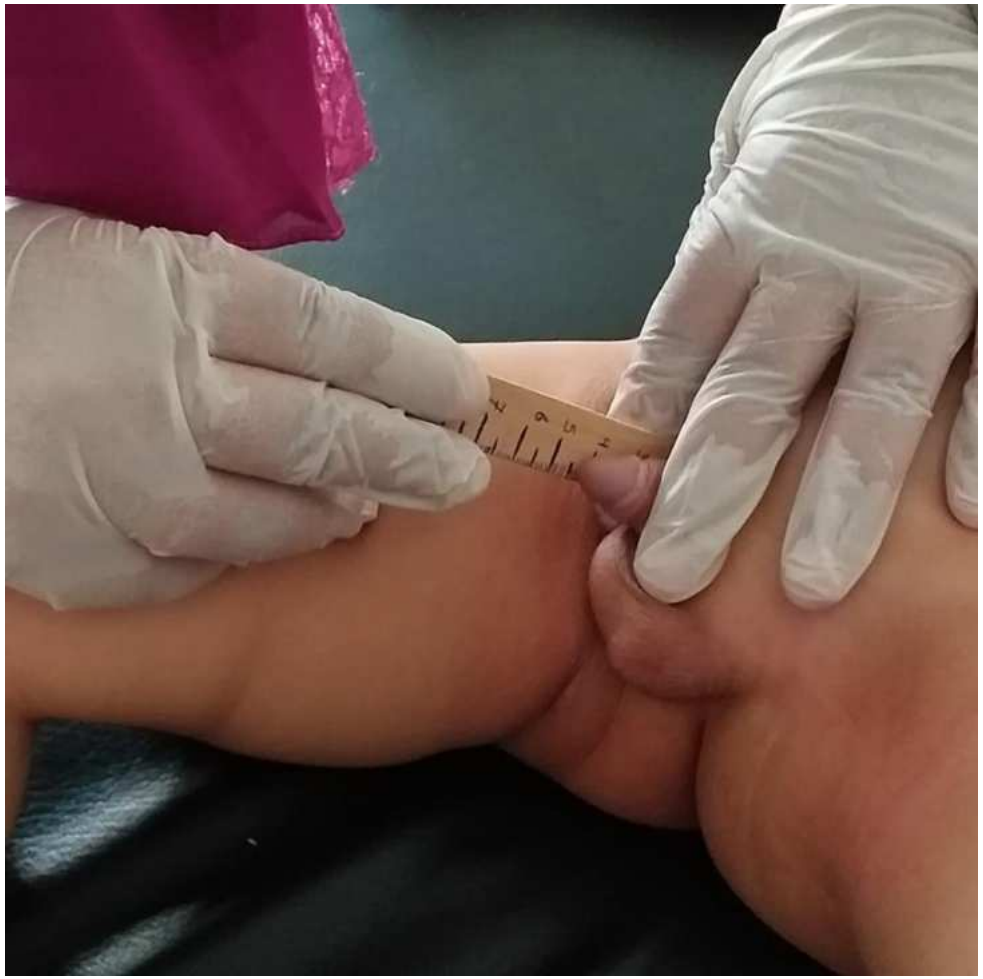
Falta de conocimiento

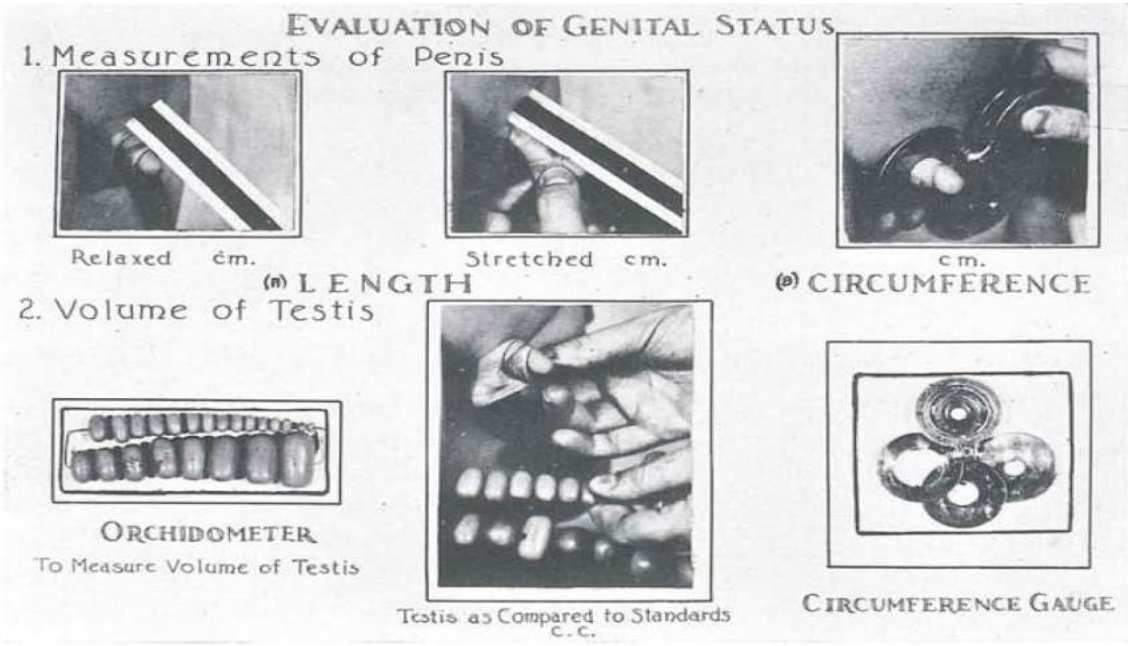
Falta de evidencia

Falta de apoyo

Diagnóstico prenatal de ADS

Falta de evidencia



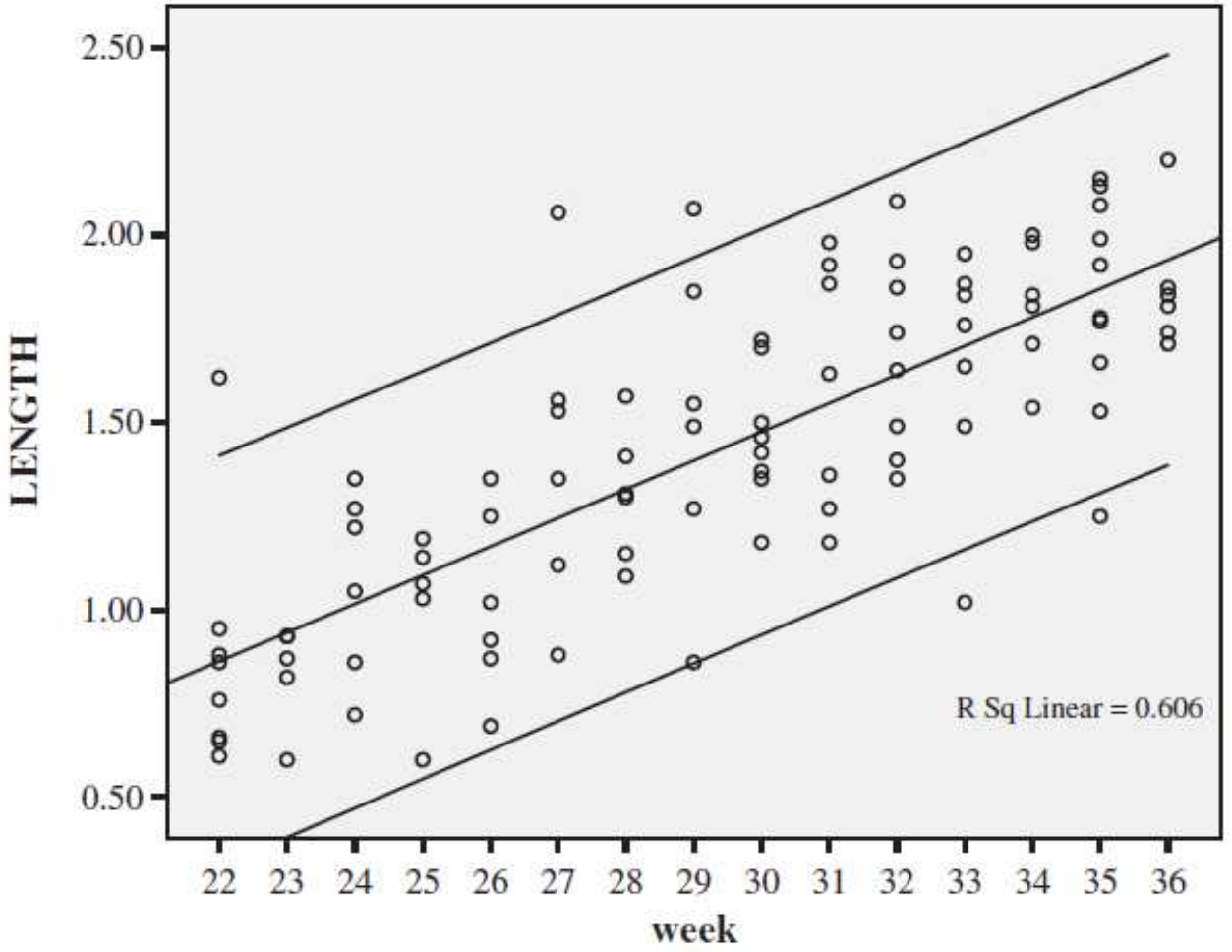


SCHONFIELD 1941

To measure SPL, the infant was placed in the dorsal decubitus position on the exam table. One end of a tongue depressor with a measuring strip (with 0.01 cm gradation) attached was placed on the pubic symphysis above and immediately adjacent to the penis while firmly applying pressure against the bone. The tongue depressor and penis were held at a 90° angle away from the infant's body. The penis was held and gently stretched while, at the same time, lowering the foreskin until the urethral meatus was visible. The distance from the lower end of the tongue depressor to the tip of the penis was measured to the nearest 0.1 cm. The protocol included two independent measurements, with a third measurement obtained if the initial measurements differed by >0.2 cm or if the measurement was below the 3rd percentile (<2 cm) or above the 97th percentile (>4.5 cm) as previously reported for term infants.[23]

Diagnóstico prenatal de ADS

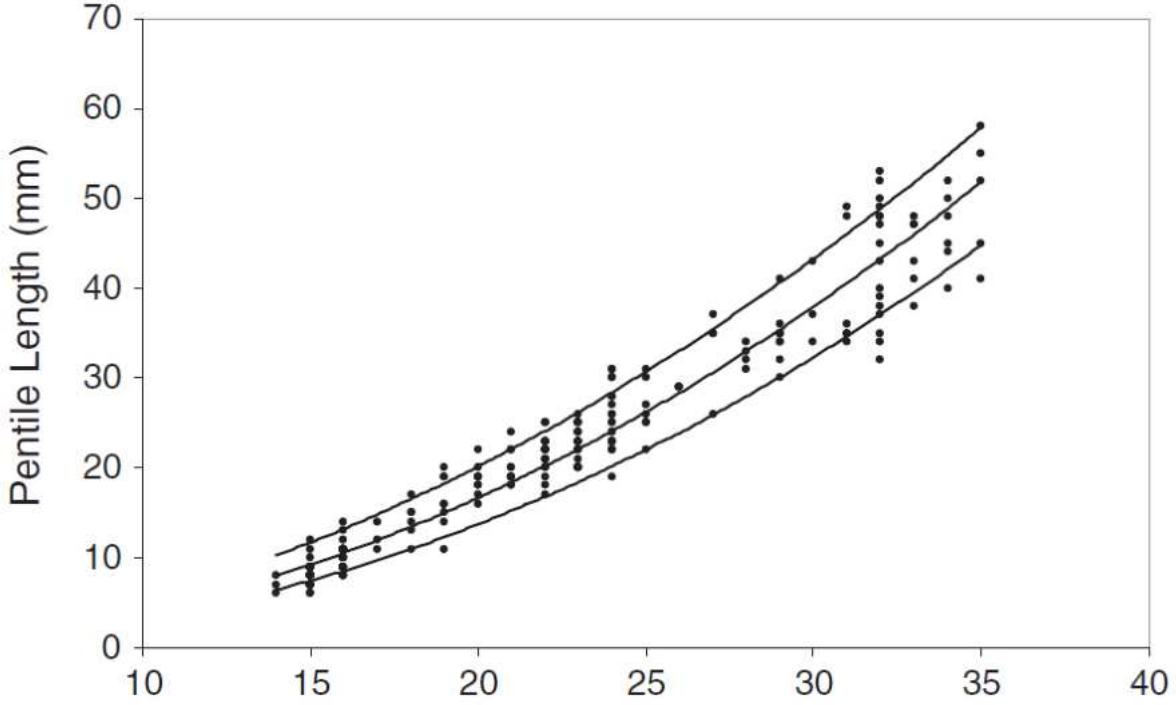
Falta de evidencia



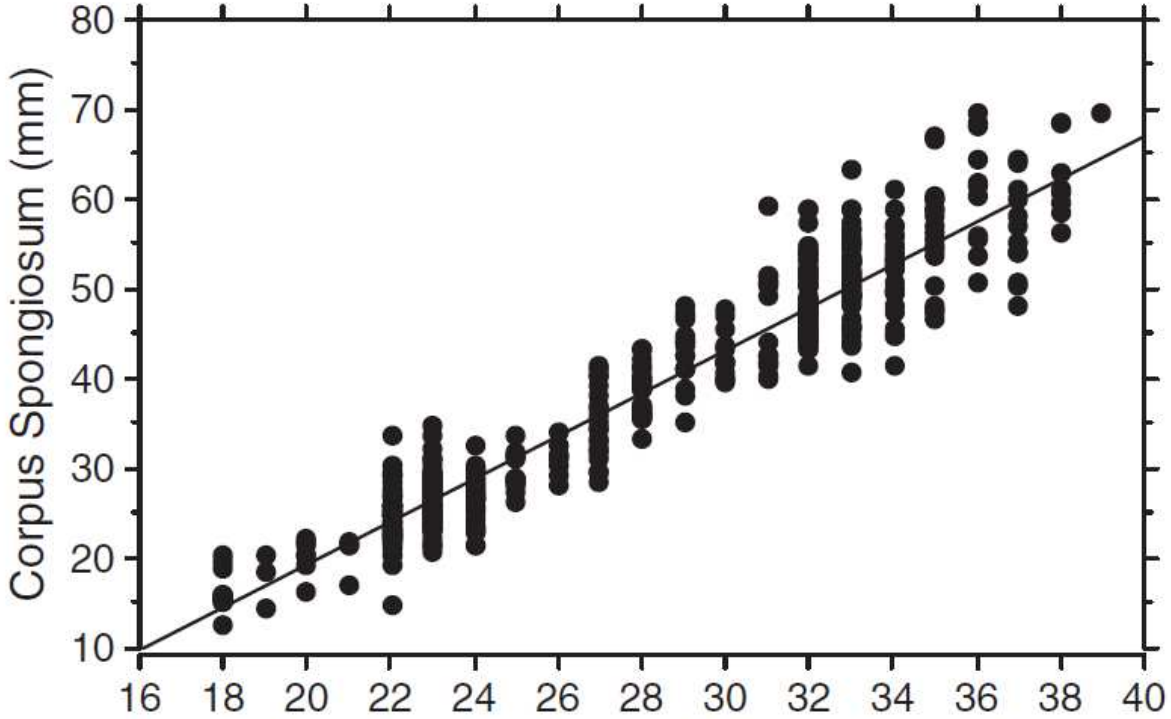
DANON 2012

Diagnóstico prenatal de ADS

Falta de evidencia



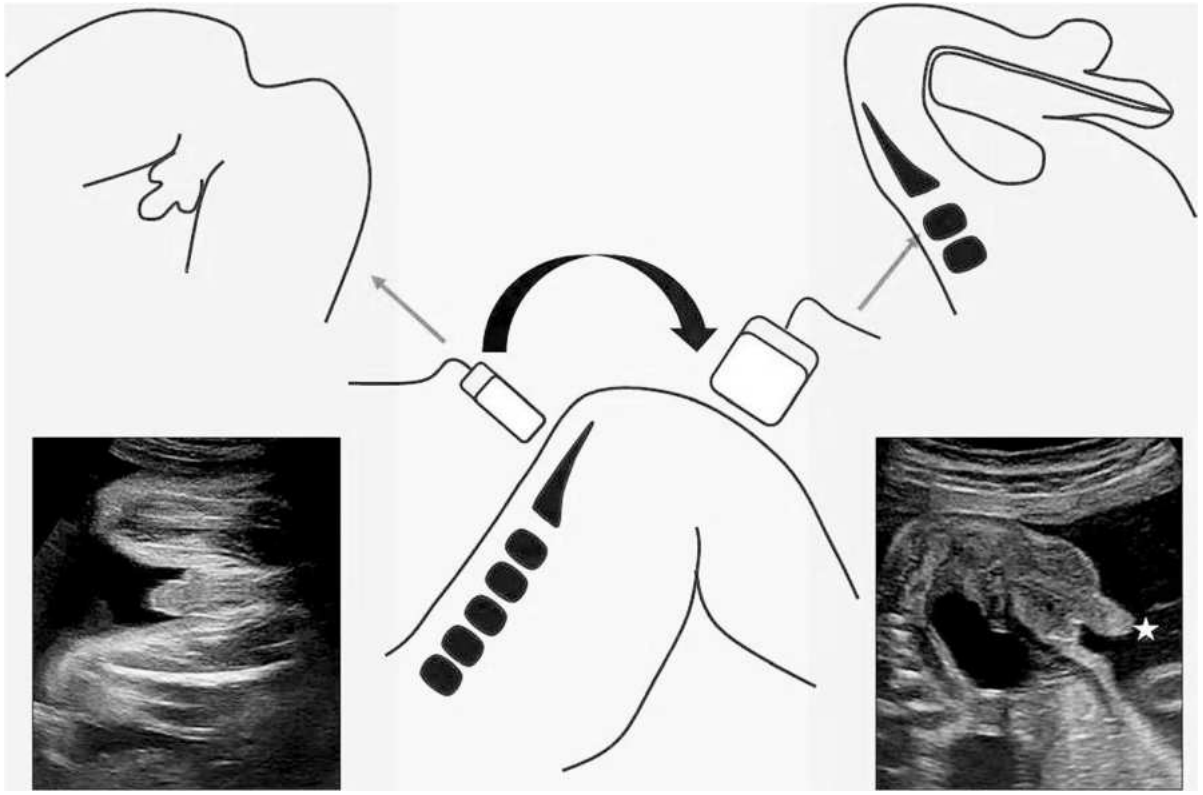
PERLITZ 2011



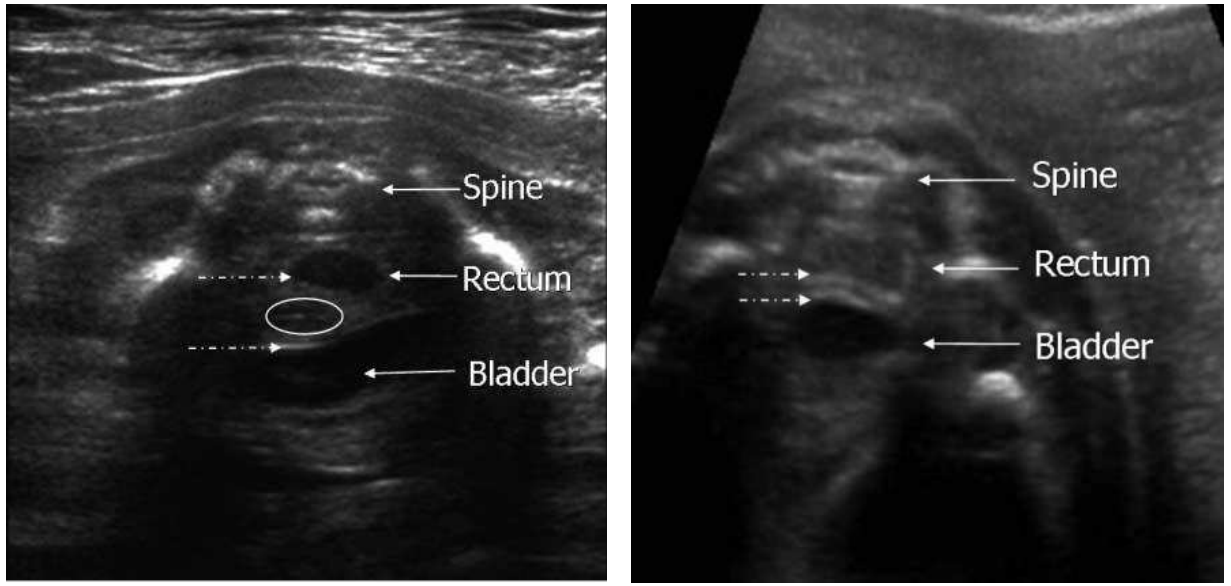
VUILLARD 2011

Diagnóstico prenatal de ADS

Falta de evidencia



GAREL 2020



GLANC 2007

Diagnóstico prenatal de ADS

Study	Year	Sample	Gestational age (weeks)	Criteria	Overall Feasibility	Overall Accuracy		
						Male	Female	Total
Alfuraih *et al.*	2021	313	11 – 13.6	AGD	65%	72%	56%	69%
Najdi *et al.*	2019	316	11 – 13.6	AGD	-	94,9%	91,2%	93%
Bogers *et al.*	2018	112	9 - 13	3D	55,2%	-	-	54,9%
Sipahi *et al.*	2018	111	11 – 13.6	AGD	-	76,8%	96,8%	86,8%
Hanprasertpong *et al.*	2016	552	16 – 20.6	Scholly	98%	89,8%	91,9%	90,8%
Arfi *et al.*	2016	310	11 – 13.6	AGD	-	87%	89%	88%
Manzanares *et al.*	2015	672	11 – 13.6	Efrat	90,5%	77,1%	97,1%	87,5%
Ballano *et al.*	2015	2314	11 – 13.6	Efrat	85,8%	94,6%	86,3%	90,1%
Lubusky *et al.*	2012	1222	11 – 13.6	Efrat	83,9%	96,3%	88,7%	92,5%
Youseff *et al.*	2011	85	11 – 13.6	3D	-	97,9%	97,2%	97,6%
Adiego *et al.*	2010	636	11 - 14	Emerson	93,8%	90,6	83,1%	86,3%
Chelli *et al.*	2009	312	11 – 14.3	Efrat	89,7%	87,9%	83,3%	85,7%
Hsiao *et al.*	2008	496	11 - 14	Whitlow	88,9%	92,5%	91,2%	91,8%
Glanc *et al.*	2007	205	14 - 40	Glanc	96,1%	100%	98,8%	99,4%
Efrat *et al.*	2006	656	12 – 13.6	Efrat	93%	99,6%	97,4%	98,5%
Hyett *et al.*	2005	32	10.5 – 13.2	Efrat	91,6%	100%	100%	100%
Adeyinka *et al.*	2005	415	15 - 40	Scholly	87,5%	83,2%	90,6%	86,5%
Mazza *et al.*	2004	2593	11.4 – 13.6	Emerson	91%	87,5%	99,1%	93,6%
Michaidilis *et al.*	2003	200	11 - 14	Emerson	81,5%	91%	89,2%	90,3
Mazza *et al.*	2001	32	11.2 – 13.2	Emerson	96,9%	82,9%	100%	92,5%
Lev Toaff *et al.*	2000	47	10 - 24	Whitlow	93,6%	100%	83,3%	92,8%
Efrat *et al.*	1999	172	11 – 13.6	Efrat	91,3%	86,7%	98,6%	92,3%
Benoit *et al.*	1999	578	12 – 13.6	Emerson	62,3%	98,4%	100%	99,2%
Whitlow *et al.*	1999	447	11 - 14	Whitlow	85%	87,8%	84,1%	86,1%
Mazza *et al.*	1999	385	11.4 – 13.6	Emerson	87,5%	91,5%	95,9%	93,6%
Mielke *et al.*	1998	172	11 – 16	Whitlow	80,3%	100%	100%	100%
Harrington *et al.*	1996	472	20	Whitlow	89,4%	95,3%	97,4%	96,7%
Meaguer *et al.*	1996	843	14 – 20	Whitlow	91,3%	99,7%	98,8%	99,3%
Nzeh *et al.*	1996	76	22 - 40	Scholly	-	95,7%	93,1%	94,7%
Watson *et al.*	1990	100	13 – 19	Scholly	91%	89,5%	97,1%	92,3%
Bronshtein *et al.*	1990	1091	13 – 16	Whitlow	88,7%	97,3%	98,5%	97,9%
Emerson *et al.*	1989	184	10 – 20	Emerson	82%	86%	79%	82%
Reece *et al.*	1987	115	16 - 20	Scholly	83,5%	90%	100%	92,7%
Elejalde *et al.*	1985	722	13 – 35	Scholly	63,6%	96,9%	92,8%	95,2%
Natsuyama *et al.*	1983	8010	12 - 40	Natsuyama	97,1%	96,4%	96,4%	96,4%
Birnholz *et al.*	1983	855	15 – 40	Whitlow	69%	99,1%	98,5%	98,8%
Dunne *et al.*	1983	113	10 - 25	Scholly	47%	100%	88%	94,3%
Limacher *et al.*	1983	104	19 – 40	Scholly	83,6%	97,8%	94,8%	97%
Plattner *et al.*	1983	266	16 - 40	Scholly	72,9%	92%	93%	92,5%
Stephens *et al.*	1983	100	16 - 18	Scholly	100%	100%	100%	100%
Shalev *et al.*	1981	381	>20	Scholly	95,2%	100%	97%	99,5%
Scholly *et al.*	1980	112	25 - 40	Scholly	64,3%	100%	100%	100%
Le Lann *et al.*	1979	103	>27	Scholly	90%	100%	100%	100%
De la Fuente *et al.*	1979	227	>20	Stocker	44%	88%	86%	87%
Stocker *et al.*	1977	229	30 - 40	Stocker	54,1%	100%	89,9%	95,2%

SOTO 2023

Diagnóstico prenatal de ADS

¿Por qué seguimos sin detectarlas?

Falta de conocimiento

Falta de evidencia

Falta de apoyo

José Gómez, campeón juvenil de petacanca, posa para 'La Verdad'. :: VICENTE VICENS/AGM

«Volveré a estudiar; de la petanca no se puede vivir»

Diagnóstico prenatal de ADS

Falta de apoyo

isuog.org

GUIDELINES

Practice guidelines for performance of the routine mid-trimester fetal ultrasound scan

Genitalia

Characterization of external genitalia to determine fetal gender is not considered mandatory in the context of a mid-trimester routine scan. Reporting of gender should be considered only with parental consent and in the context of local practices.

Table 1 Recommended minimum requirements for basic mid-trimester fetal anatomical survey

Head	Intact cranium
	Cavum septi pellucidi
	Midline falx
	Thalami
	Cerebral ventricles
	Cerebellum
	Cisterna magna
Face	Both orbits present
	Median facial profile*
	Mouth present
	Upper lip intact
Neck	Absence of masses (e.g. cystic hygroma)
Chest/Heart	Normal appearing shape/size of chest and lungs
	Heart activity present
	Four-chamber view of heart in normal position
	Aortic and pulmonary outflow tracts*
	No evidence of diaphragmatic hernia
Abdomen	Stomach in normal position
	Bowel not dilated
	Both kidneys present
	Cord insertion site
Skeletal	No spinal defects or masses (transverse and sagittal views)
	Arms and hands present, normal relationships
	Legs and feet present, normal relationships
Placenta	Position
	No masses present
	Accessory lobe
Umbilical cord	Three-vessel cord*
Genitalia	Male or female*

*Optional component of checklist: can be evaluated if technically feasible.

Diagnóstico prenatal de ADS

Falta de apoyo

isuog.org GUIDELINES

ISUOG Practice Guidelines (updated): performance of the routine mid-trimester fetal ultrasound scan

Characterization of external genitalia to determine fetal gender is not considered part of the routine mid-trimester scan. Reporting of gender should be considered only on parental request and in the context of local practice and regulations. However, the normal appearance of the external genitalia should be checked.

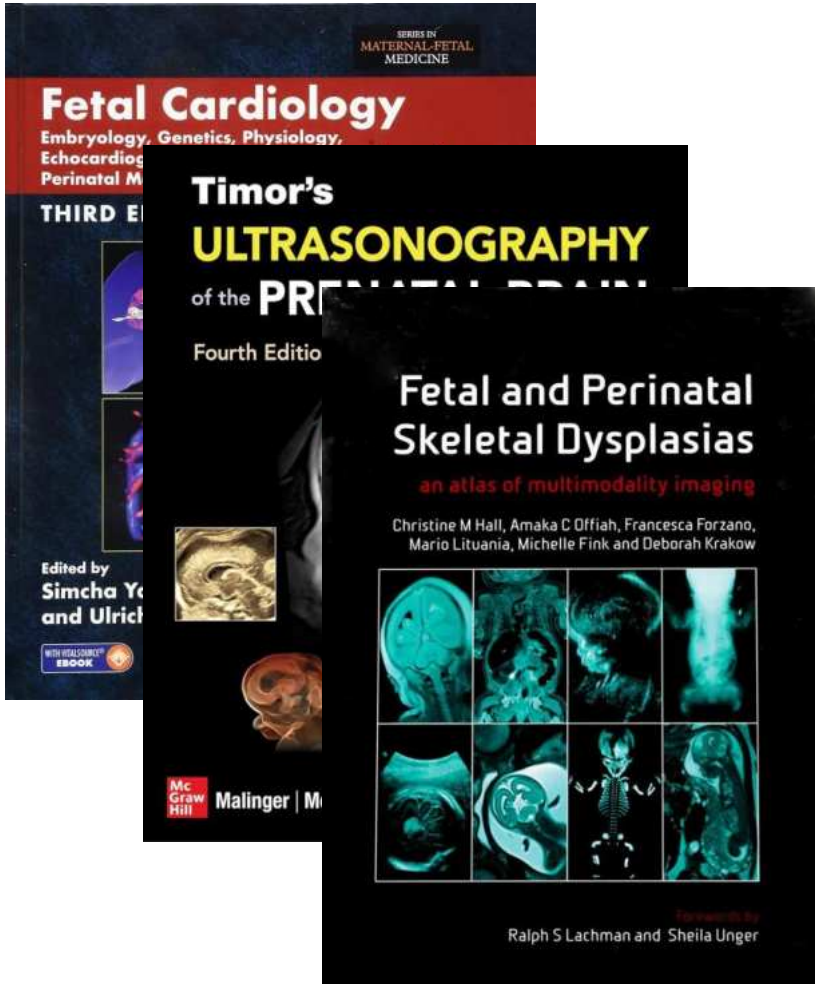
Table 1 Suggested minimum (and *optional) requirements for basic mid-trimester fetal anatomical survey

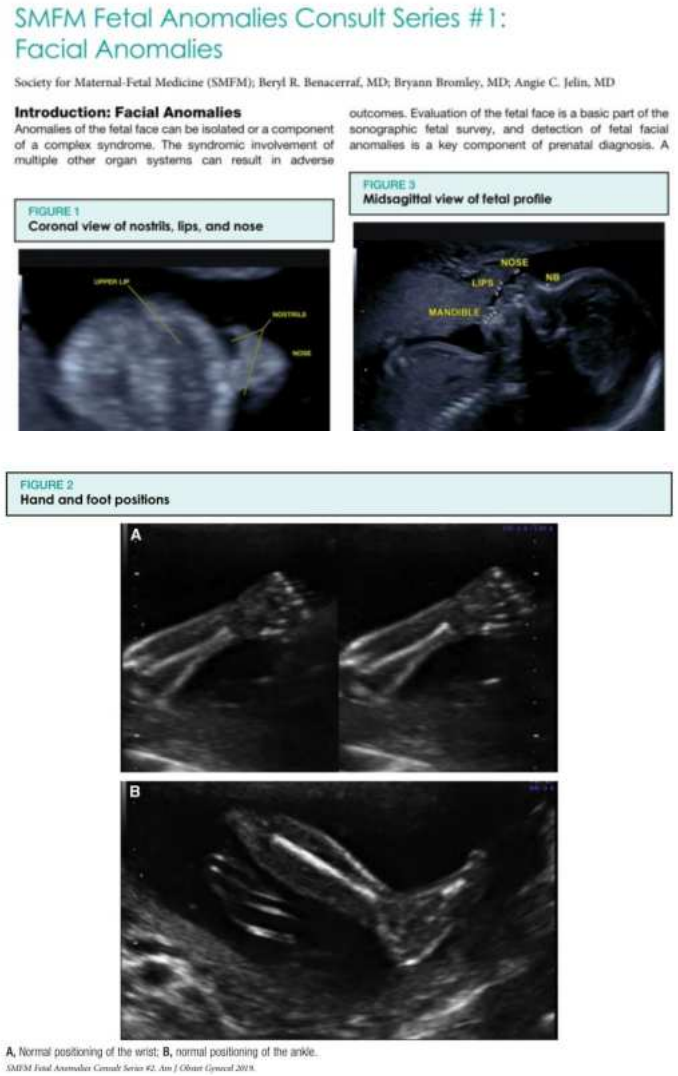
Head	Intact cranium Head shape normal Cavum septi pellucidi normal in appearance Choroid plexus normal in appearance Midline falx normal in appearance Thalami normal in appearance Lateral cerebral ventricles normal in appearance Cerebellum normal in appearance Cisterna magna normal in appearance Nuchal fold* normal in appearance
Face	Both orbits and bulbi present Midsagittal facial profile* normal in appearance Nasal bone* normal in appearance Upper lip intact
Neck	Absence of masses (e.g. cystic hygroma)
Chest/heart	Chest and lungs appearing normal in shape/size Heart activity present Four-chamber view of heart in normal position (left chambers on left side) Aortic and pulmonary outflow tracts (relative size and their relationships) normal LVOT view; three-vessel view or three-vessels-and-trachea view normal No evidence of diaphragmatic hernia
Abdomen	Stomach in normal position on left side Bowel normal (not dilated or hyperechogenic) Gallbladder on right side* Both kidneys present, no pyelectasis Urinary bladder normal in appearance Cord insertion site into the fetal abdomen normal
Skeletal	No spinal defects or masses (transverse and sagittal views) Arms and hands present, normal joint position Legs and feet present, normal joint position
Placenta	Placental position and relation to cervix normal No masses present
Umbilical cord	Three-vessel cord* Cord insertion into placenta* normal
Genitalia	Normal male or female genitalia*
Cervix	Cervical-length measurement normal*

*Optional component of checklist: can be evaluated if technically feasible and according to local practice. LVOT, left ventricular outflow tract.

Diagnóstico prenatal de ADS

Falta de apoyo




SMFM Fetal Anomalies Consult Series #1:
Facial Anomalies

Society for Maternal-Fetal Medicine (SMFM); Beryl R. Benacerraf, MD; Bryann Bromley, MD; Angie C. Jelin, MD

Introduction: Facial Anomalies

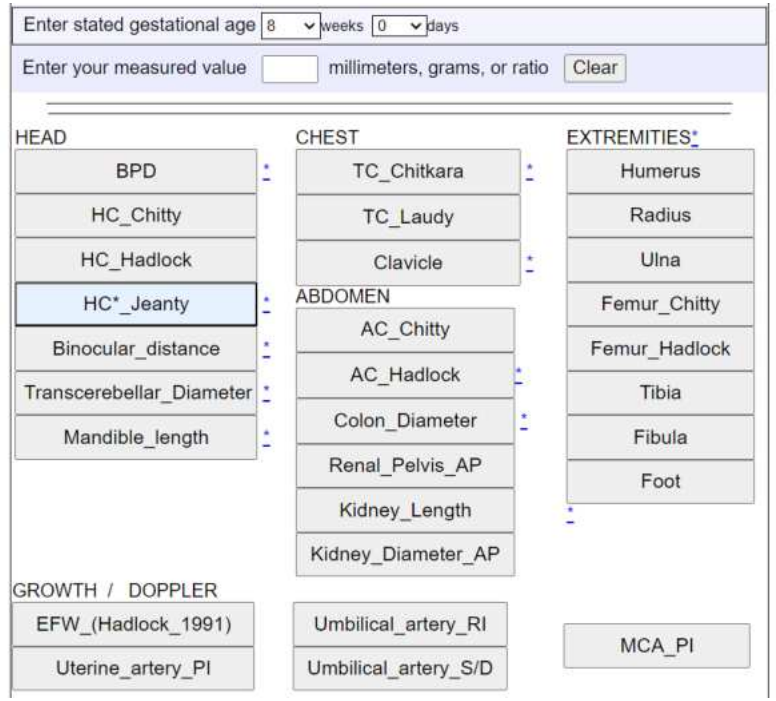
Anomalies of the fetal face can be isolated or a component of a complex syndrome. The syndromic involvement of multiple other organ systems can result in adverse outcomes. Evaluation of the fetal face is a basic part of the sonographic fetal survey, and detection of fetal facial anomalies is a key component of prenatal diagnosis. A

FIGURE 1
Coronal view of nostrils, lips, and nose

FIGURE 3
Midsagittal view of fetal profile

FIGURE 2
Hand and foot positions

A, Normal positioning of the wrist; B, normal positioning of the ankle.



PROTOCOLO: NEUROSONOGRAFÍA FETAL

NEUROSONOGRAFIA FETAL

Hospital Clínic | Hospital Sant Joan de Déu | Universitat de Barcelona.

PROTOCOLO: MANEJO PRENATAL DE LAS DILATACIONES URINARIAS DEL TRACTO SUPERIOR

MANEJO PRENATAL DE LAS DILATACIONES URINARIAS DEL TRACTO SUPERIOR

Hospital Clínic | Hospital Sant Joan de Déu | Universitat de Barcelona.

PROTOCOLO: ECOCARDIOGRAFÍA FUNCIONAL FETAL

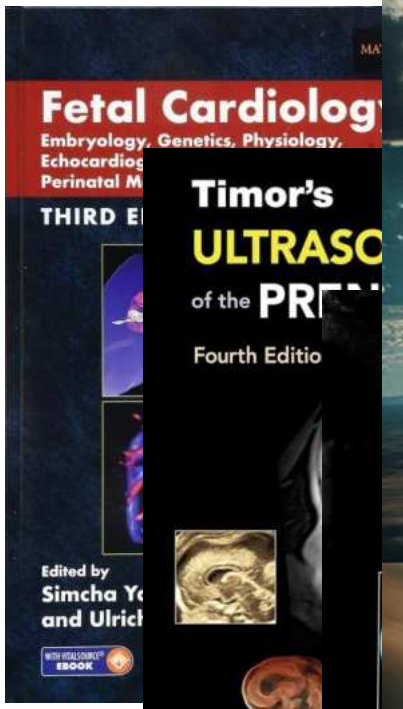
ECOCARDIOGRAFÍA FUNCIONAL FETAL

Unidad de Cardiología Fetal

Hospital Clínic | Hospital Sant Joan de Déu | Universitat de Barcelona

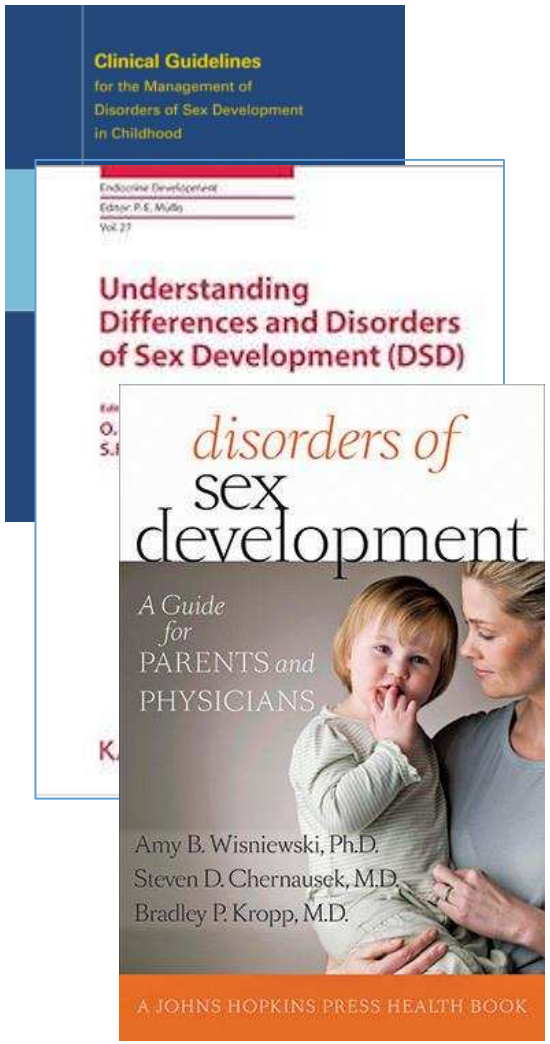
Diagnóstico prenatal de ADS

Falta de apoyo



Diagnóstico prenatal de ADS

Falta de apoyo



www.analesdepediatria.org

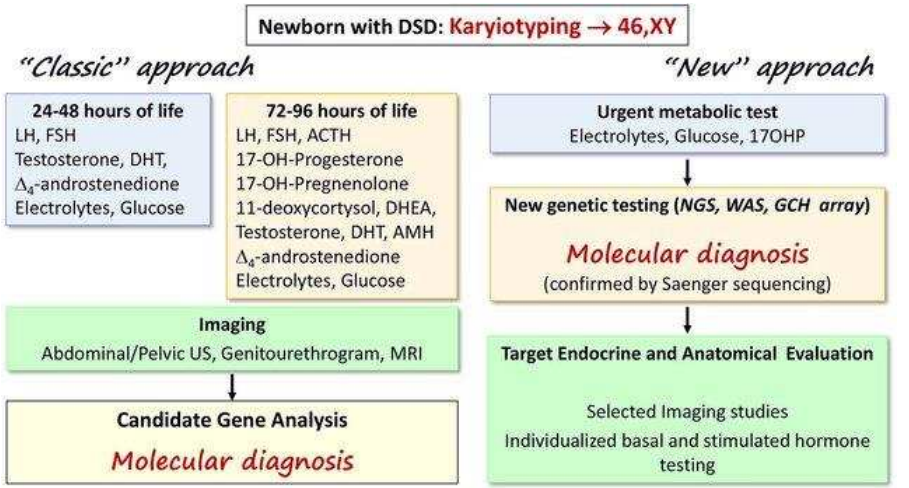
ASOCIACIÓN ESPAÑOLA DE PEDIATRÍA

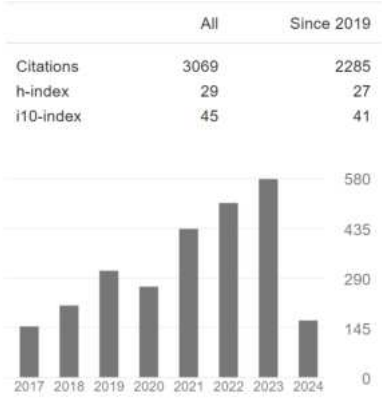
Guía de actuación en las anomalías de la diferenciación sexual (ADS) / desarrollo sexual diferente (DSD)

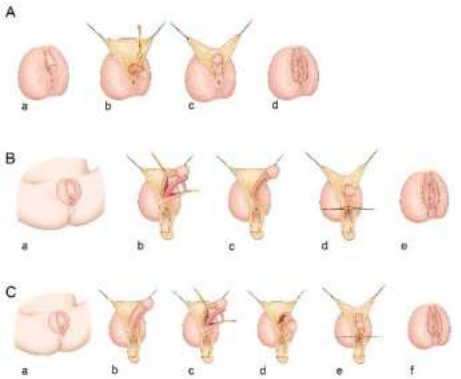
Julio Guerrero-Fernández[a,b,*], Cristina Azcona San Julián[a,c], Jesús Barreiro Conde[a,d], José Antonio Bermúdez de la Vega[a,e], Atilano Carcavilla Urquí[a,b], Luis Antonio Castaño González[a,f], José María Martos Tello[a,g], Amaya Rodríguez Estévez[a,h], Diego Yeste Fernández[a,i], Leopoldo Martínez Martínez[j], María José Martínez-Urrutia[k], Cristina Mora Palma[b] y Laura Audí Parera[a,l]

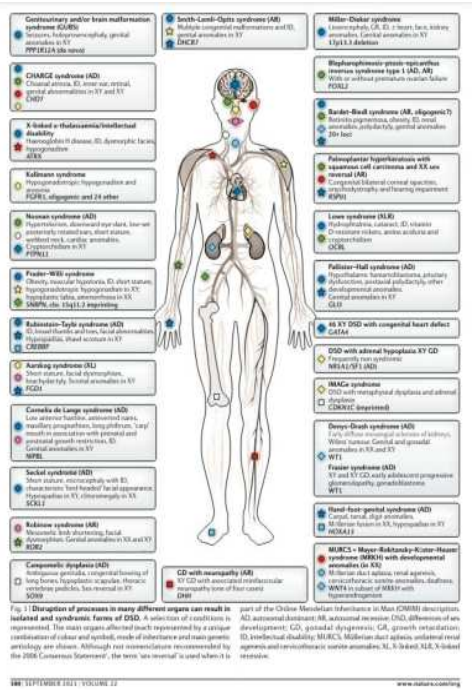
[a] Grupo de Trabajo sobre ADS/DSD de la Sociedad Española de Endocrinología Pediátrica (SEEP)
[b] Servicio de Endocrinología Pediátrica, Hospital Infantil La Paz, Madrid, España
[c] Departamento de Pediatría, Área de Endocrinología, Clínica Universidad de Navarra, Pamplona, España
[d] Unidad de Endocrinología Pediátrica, Crecimiento y Adolescencia, Hospital Clínico Universitario de Santiago de Compostela, Santiago de Compostela, España
[e] Sección de Endocrinología Pediátrica, Hospital Universitario Virgen Macarena, Sevilla, España
[f] Instituto BioCruces - Endocrinología Pediátrica, Hospital Universitario Cruces, Barakaldo, España
[g] Unidad de Endocrinología Pediátrica, Hospital Universitario Virgen de La Arrixaca, Murcia, España
[h] Servicio de Pediatría - Endocrinología, Hospital Universitario Cruces, Barakaldo, España
[i] Servicio de Endocrinología Pediátrica, Hospital Materno Infantil Vall d'Hebron, CIBER de Enfermedades Raras (CIBERER), Barcelona, España
[j] Servicio de Cirugía Pediátrica, Hospital Infantil La Paz, Madrid, España
[k] Servicio de Urología Pediátrica, Hospital Infantil La Paz, Madrid, España
[l] Vall d'Hebron Institut de Recerca (VHIR), CIBER de Enfermedades Raras (CIBERER), Hospital Vall d'Hebron, Barcelona, España

Recibido el 30 de abril de 2018; aceptado el 5 de junio de 2018
Disponible en Internet el 20 de julio de 2018



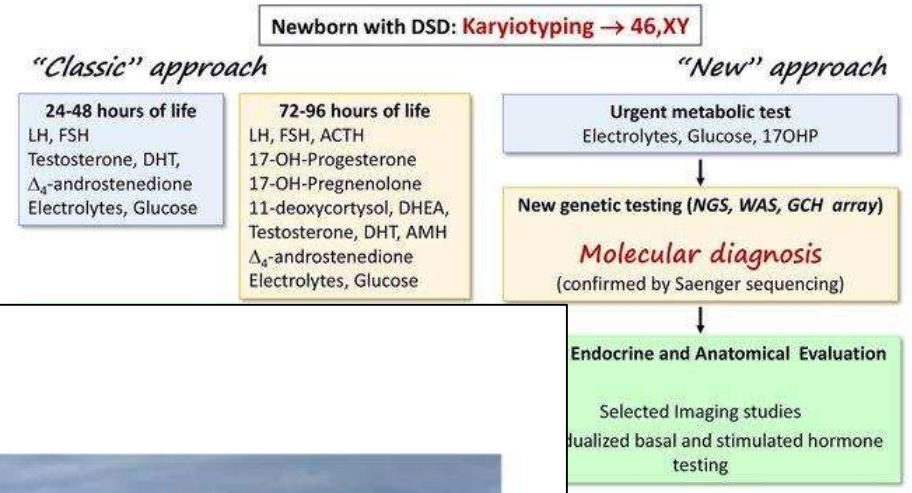


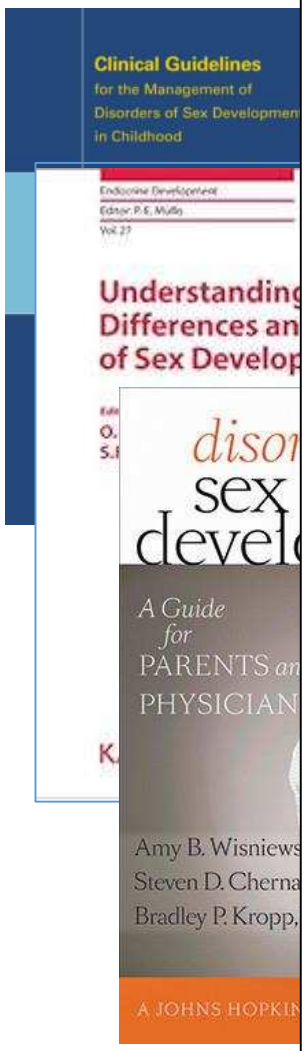


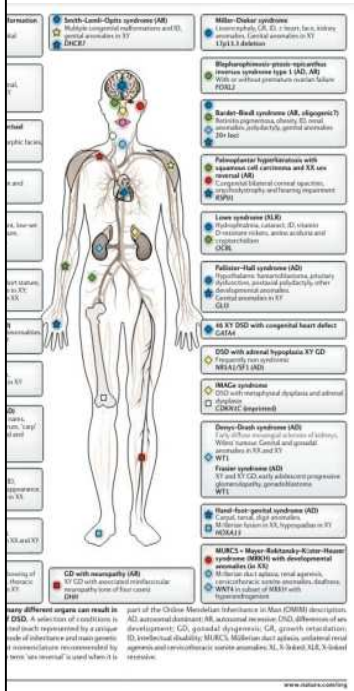


Diagnóstico prenatal de ADS

Falta de apoyo

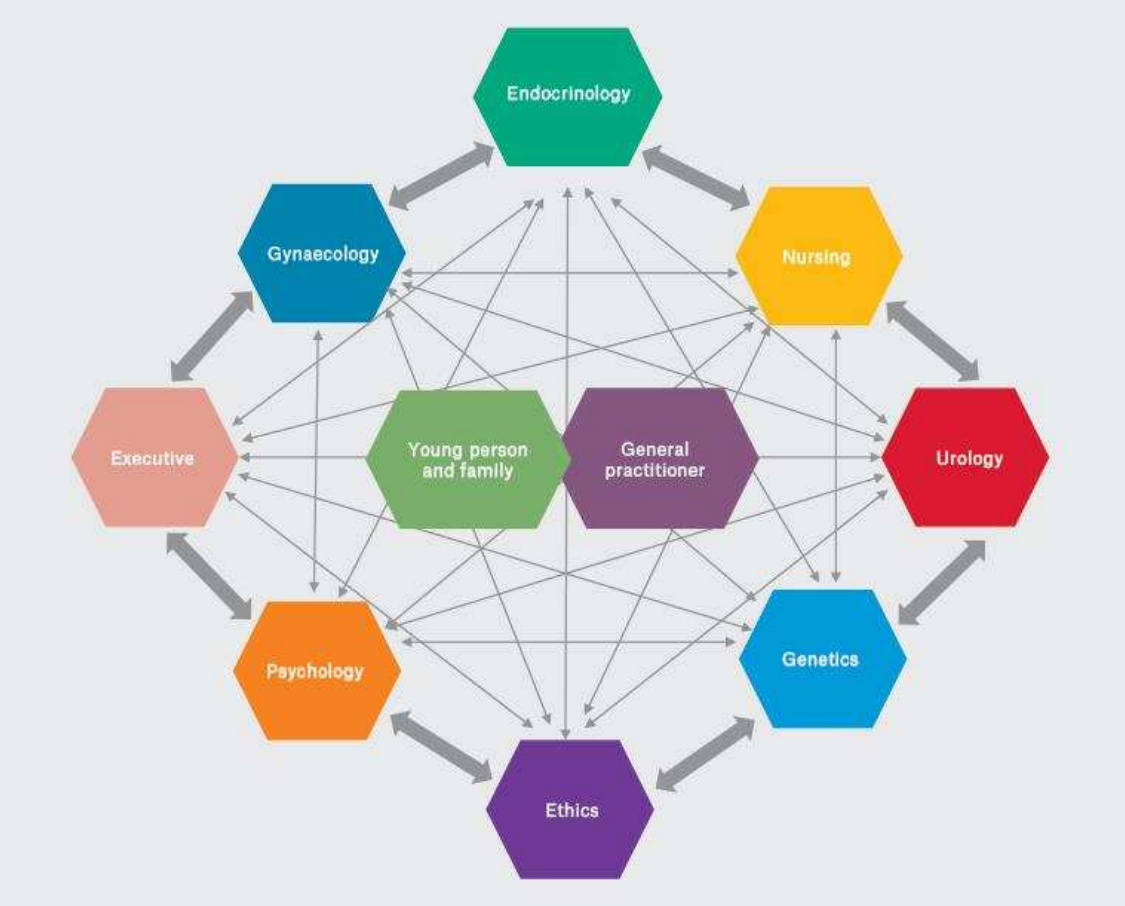






Diagnóstico prenatal de ADS

Falta de apoyo

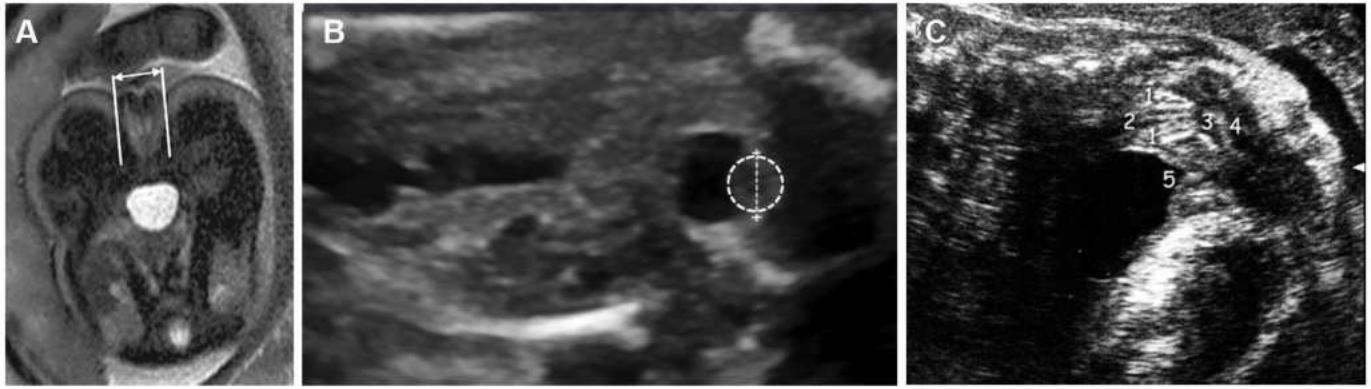


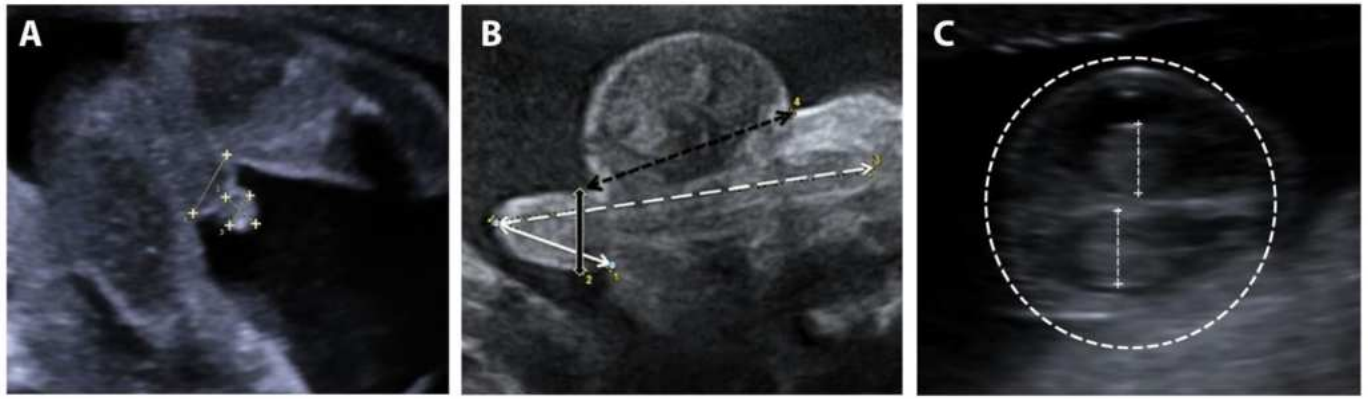
Diagnóstico prenatal y postnatal de ADS

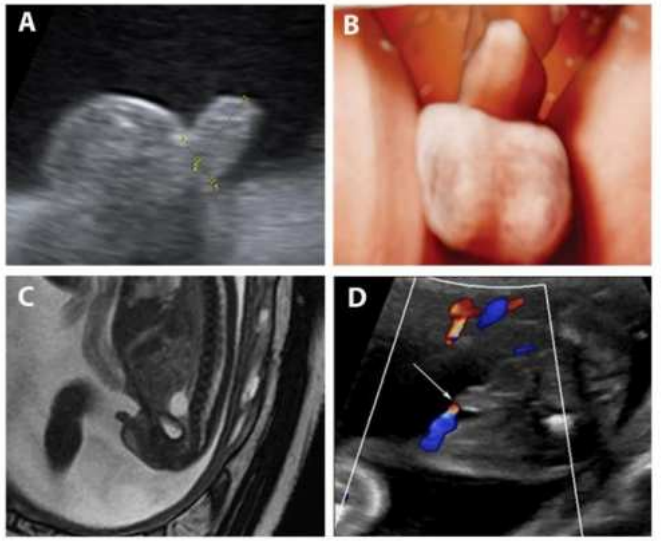
Diagnóstico prenatal y postnatal de ADS

Imaging in fetal genital anomalies

European Journal of Obstetrics & Gynecology and Reproductive Biology 283 (2023) 13–24



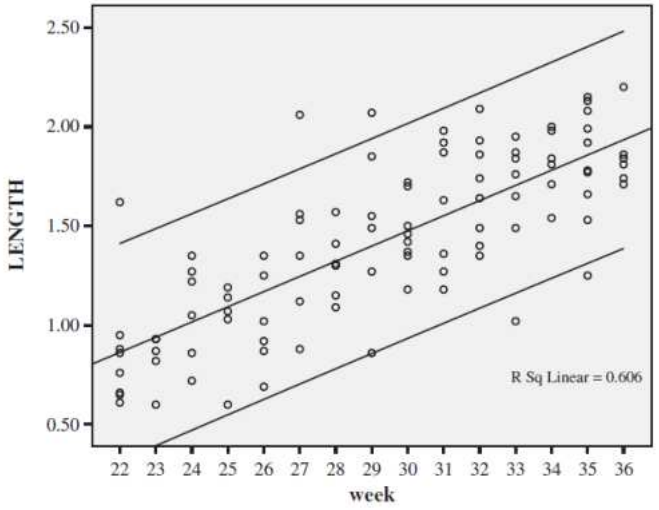


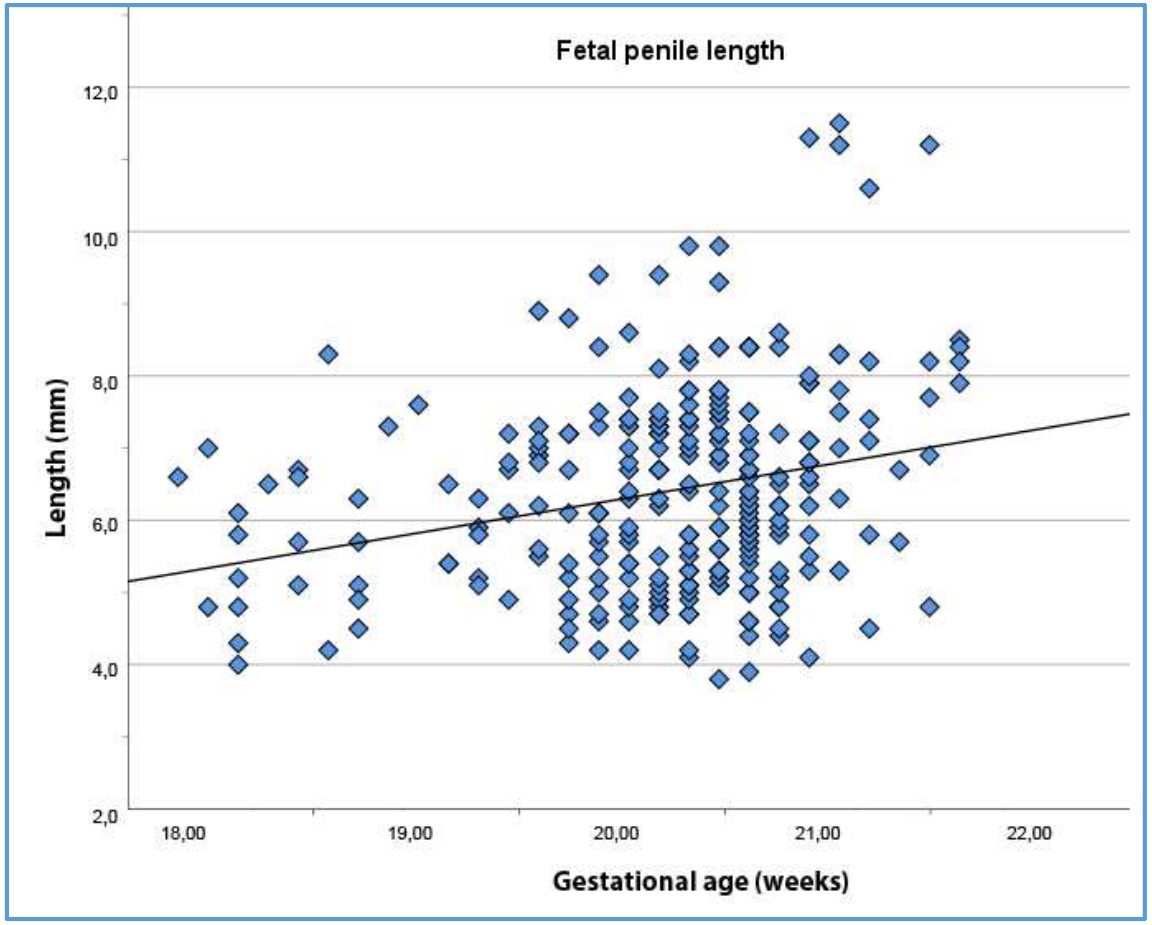


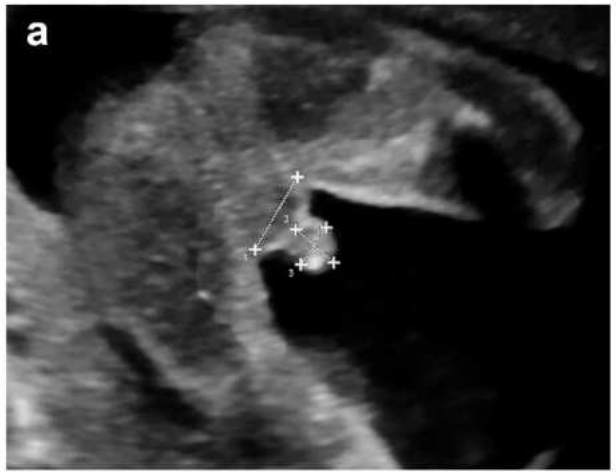
Diagnóstico prenatal y postnatal de ADS

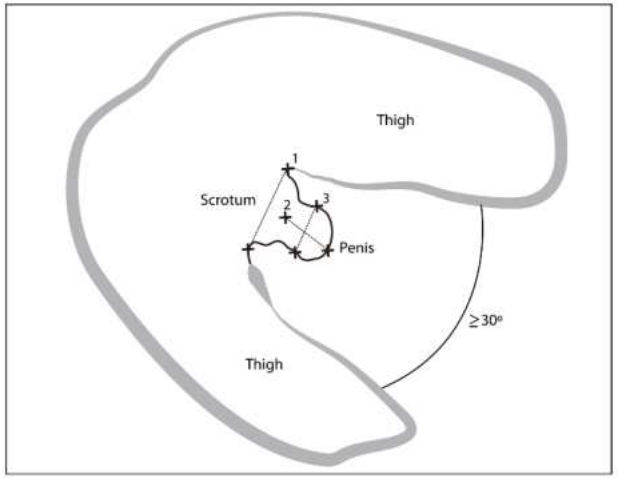
Open-legs axial plane: A standardized methodology and reference values for fetal genital biometry in mid-trimester ultrasound

European Journal of Obstetrics & Gynecology and Reproductive Biology 263 (2021) 50–55





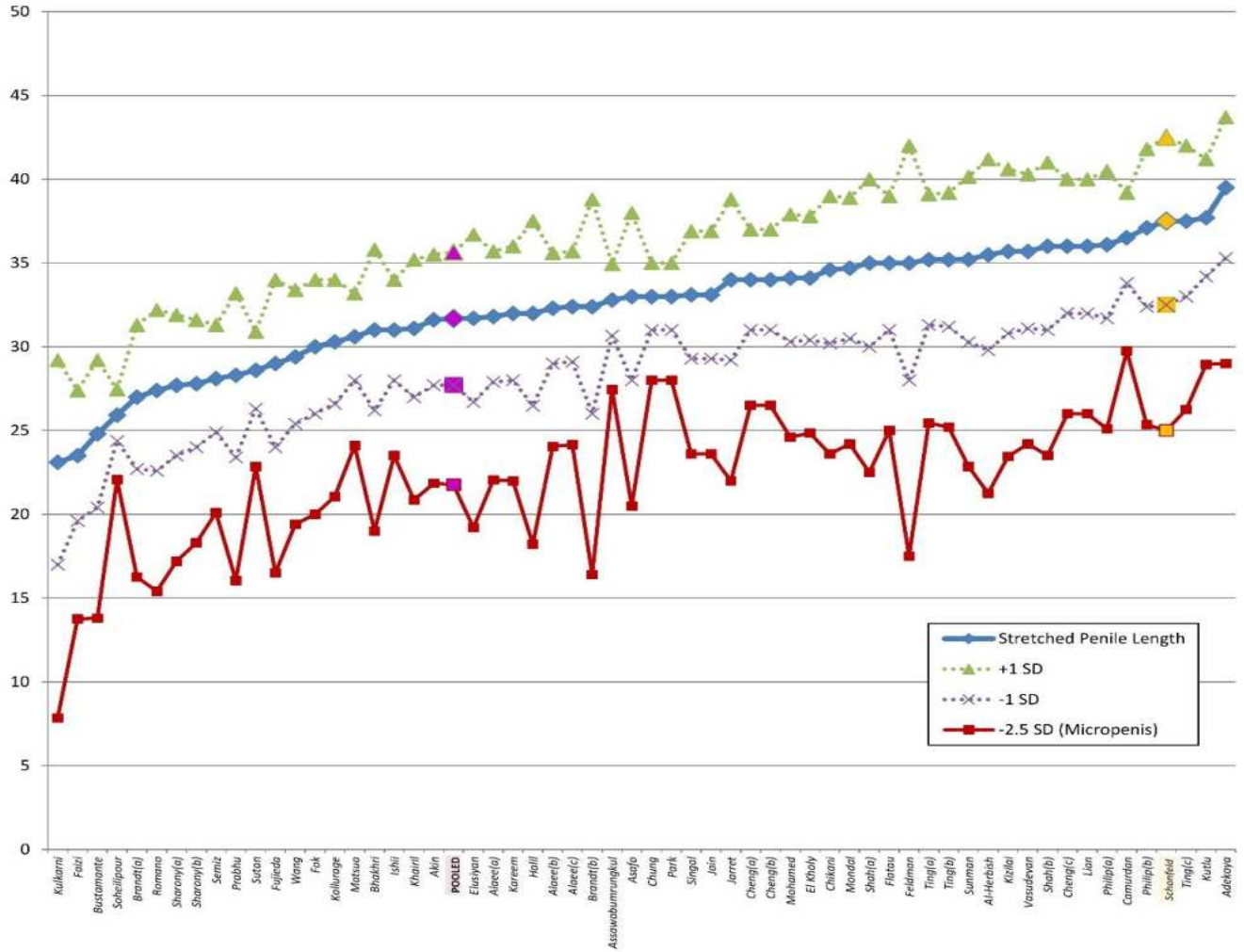




Diagnóstico prenatal y postnatal de ADS

Stretched penile length at birth: a systematic review

J Pediatr Endocrinol Metab 2021; aop



Diagnóstico prenatal y postnatal de ADS

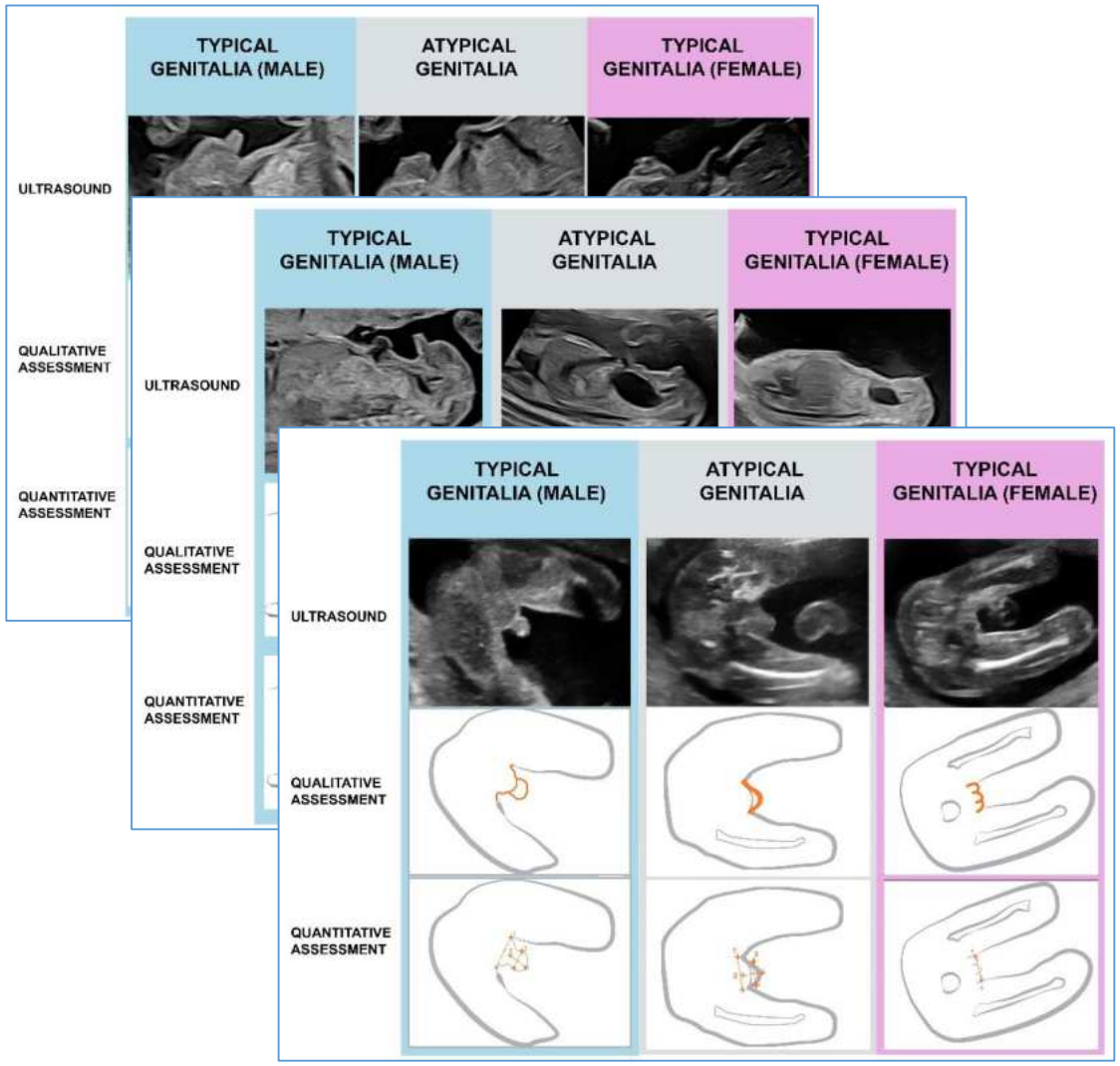
Prenatal ambiguous/atypical genitalia: why are we still missing it and how can we improve diagnosis?

Ultrasound Obstet Gynecol 2024

isuog.org GUIDELINES

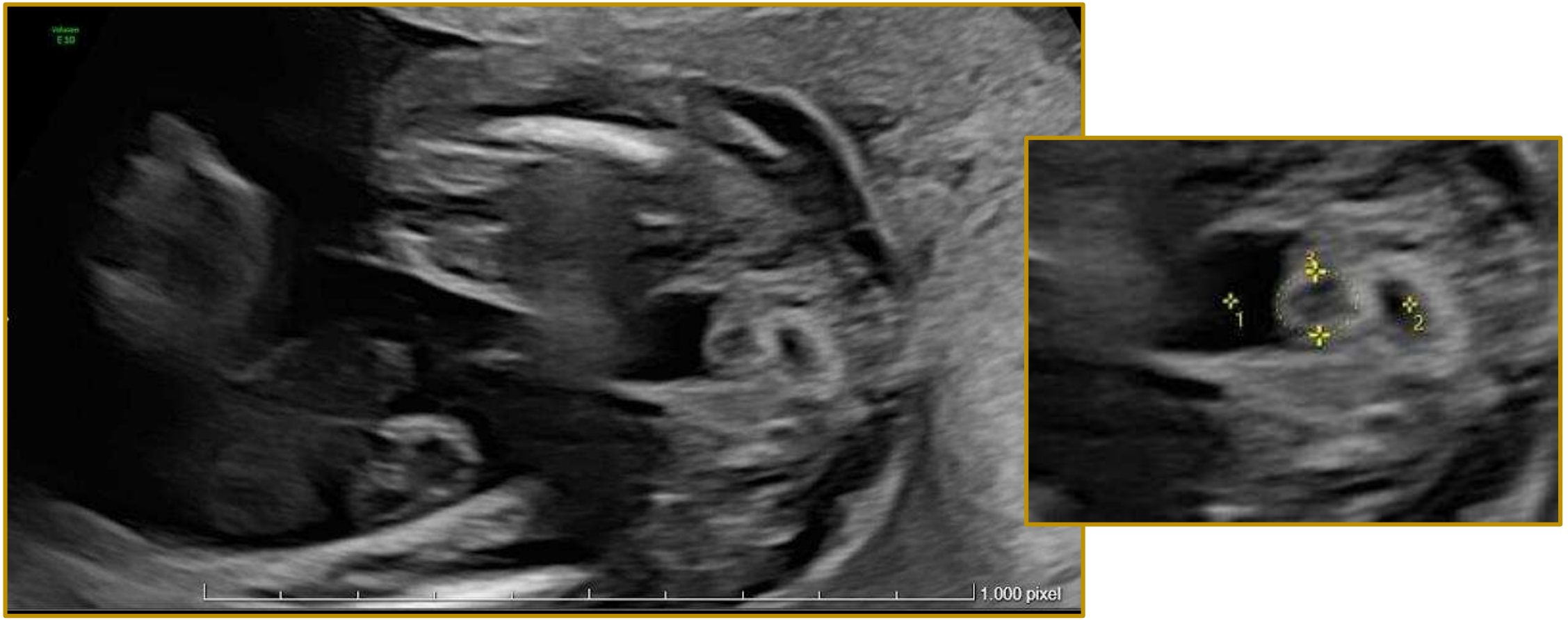
ISUOG Practice Guidelines (updated): performance of the routine mid-trimester fetal ultrasound scan

Characterization of external genitalia to determine fetal gender is not considered part of the routine mid-trimester scan. Reporting of gender should be considered only on parental request and in the context of local practice and regulations. However, the normal appearance of the external genitalia should be checked.



Diagnóstico prenatal y postnatal de ADS

Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs



Diagnóstico prenatal y postnatal de ADS

SORIANO 1999

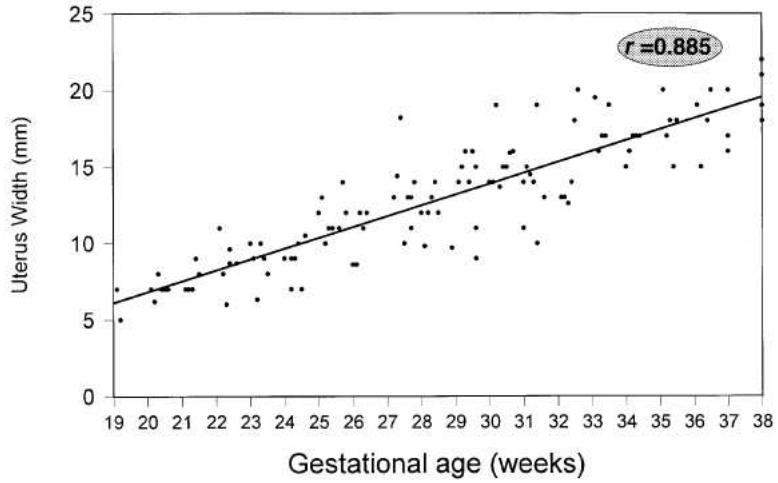
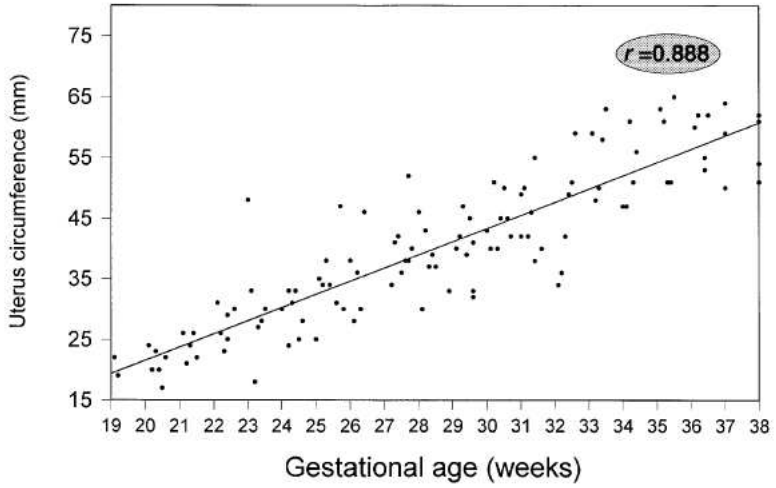
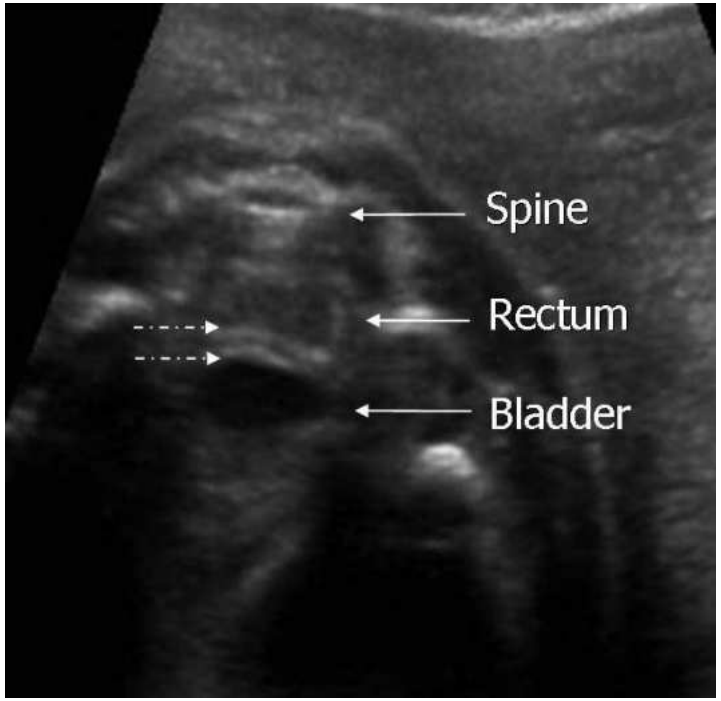
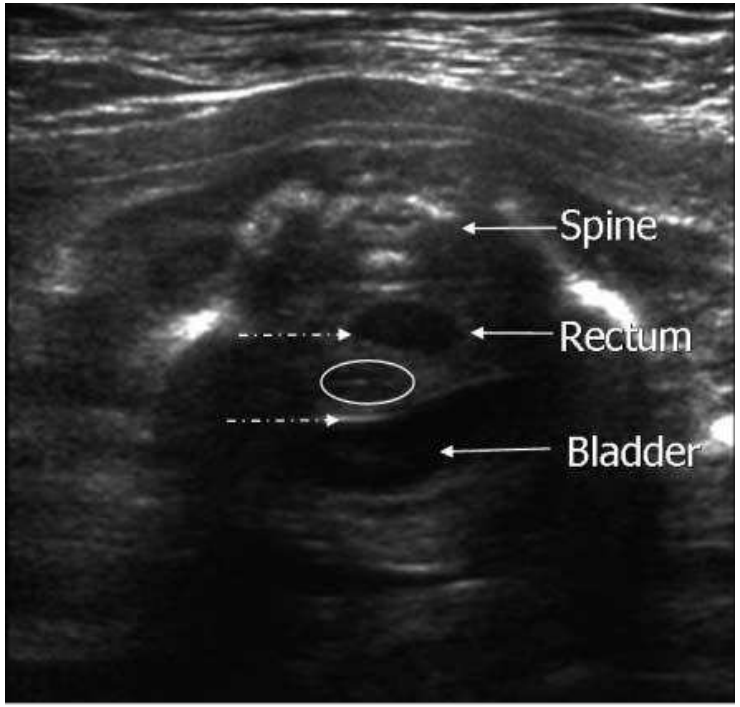


Figure 2. Individual scatter plot showing the relationship between the uterus width in millimetres and gestational age of 140 normal fetuses.

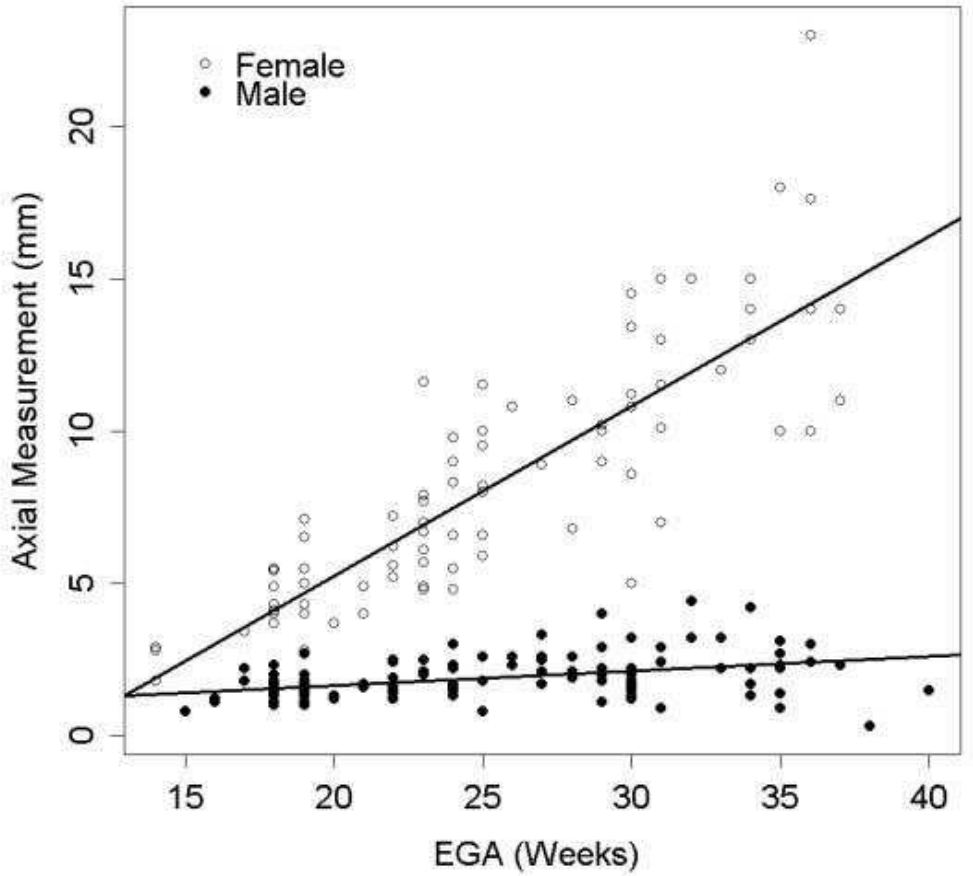


Diagnóstico prenatal y postnatal de ADS





GLANC 2007



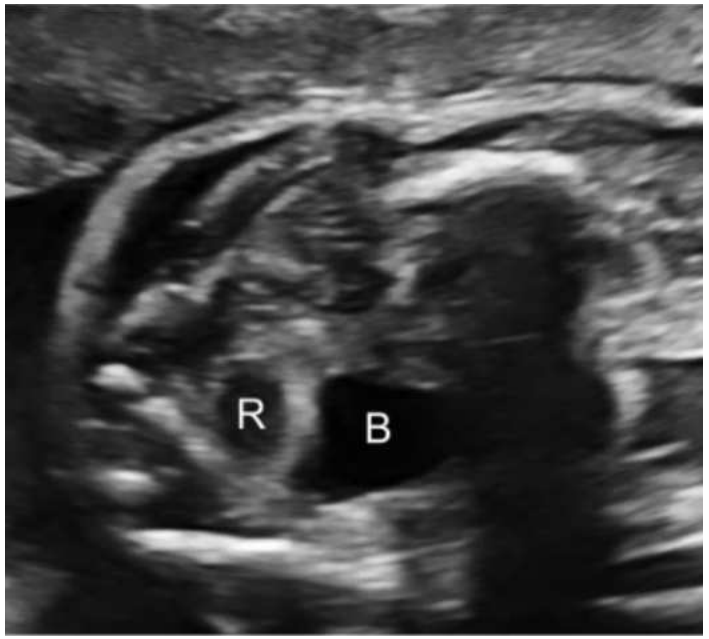
Diagnóstico prenatal y postnatal de ADS

Sonographic Assessment of Fetal Sex: More than External Genitalia

SMET 2023

Diagnóstico prenatal y postnatal de ADS

Prenatal visualization of the fetal uterus in routine 2D ultrasound examination

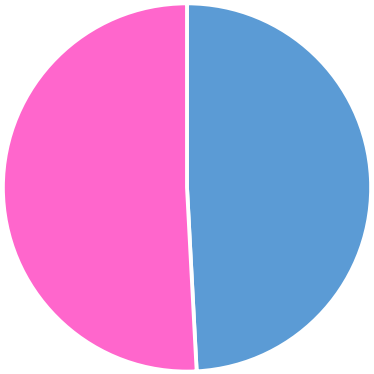


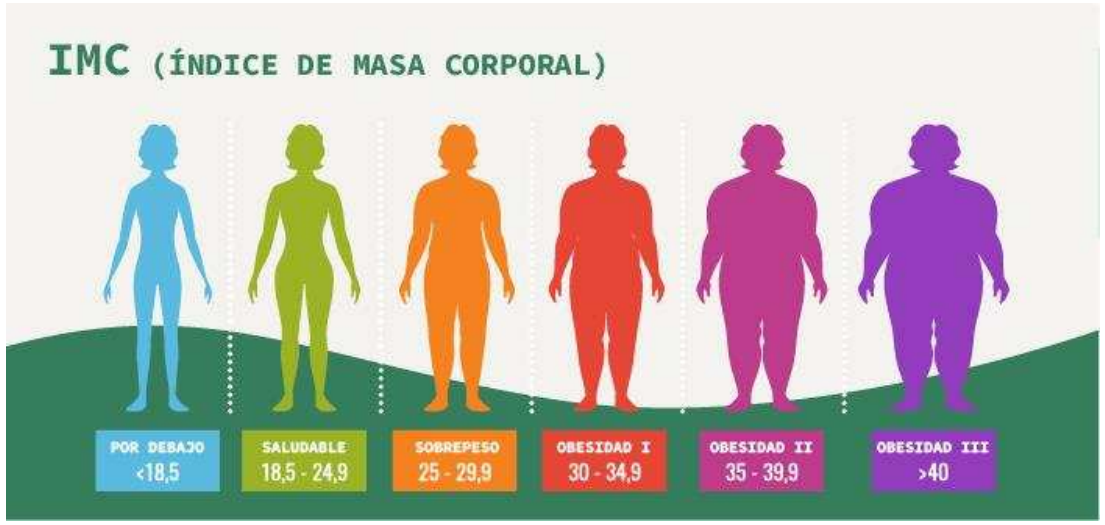
AZUMENDI 2025

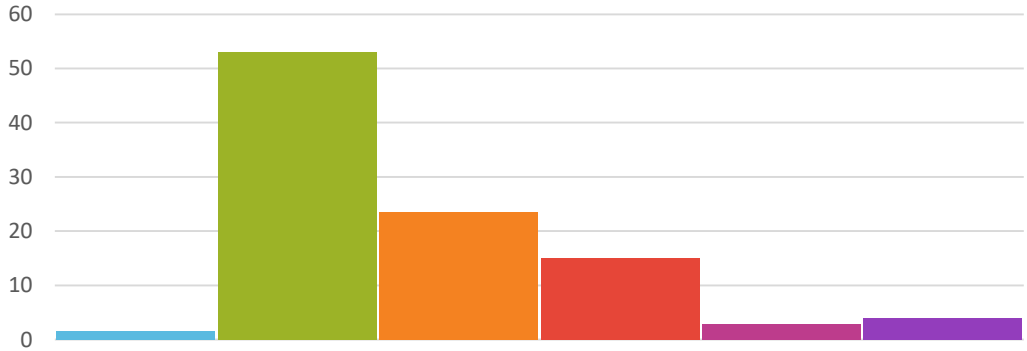
Diagnóstico prenatal y postnatal de ADS

Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs

Datos demográficos
N: 358 fetos (176M/182F)
EG media: 20.5 SG (17.3 – 24.4)
PFE medio: 357g (238 – 711)
Edad media: 31a (18 – 46)
IMC medio: 26,07 kg/m2 (17 – 55)

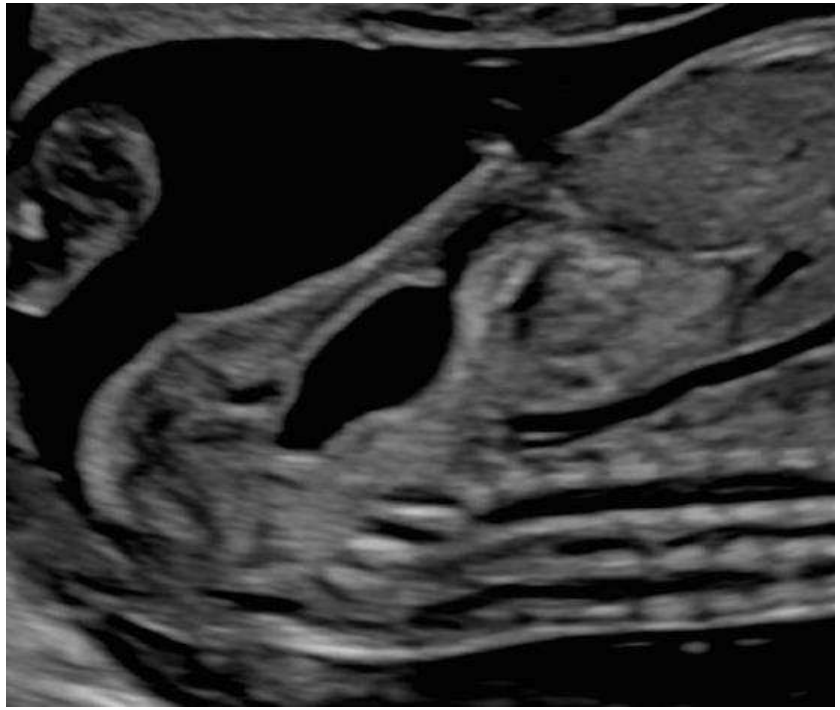


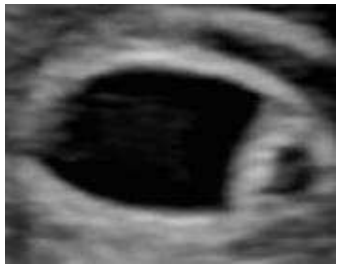


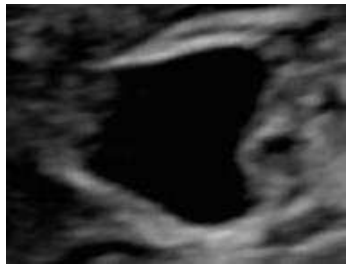


Diagnóstico prenatal y postnatal de ADS

Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs



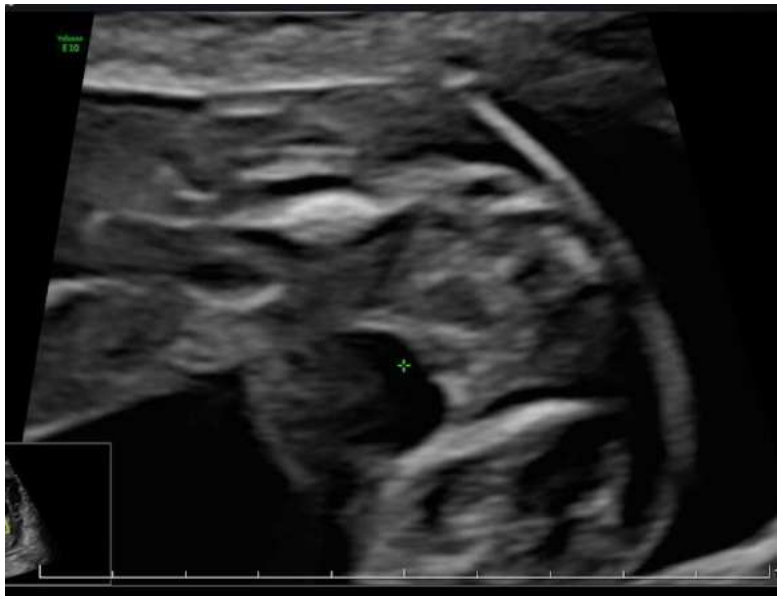


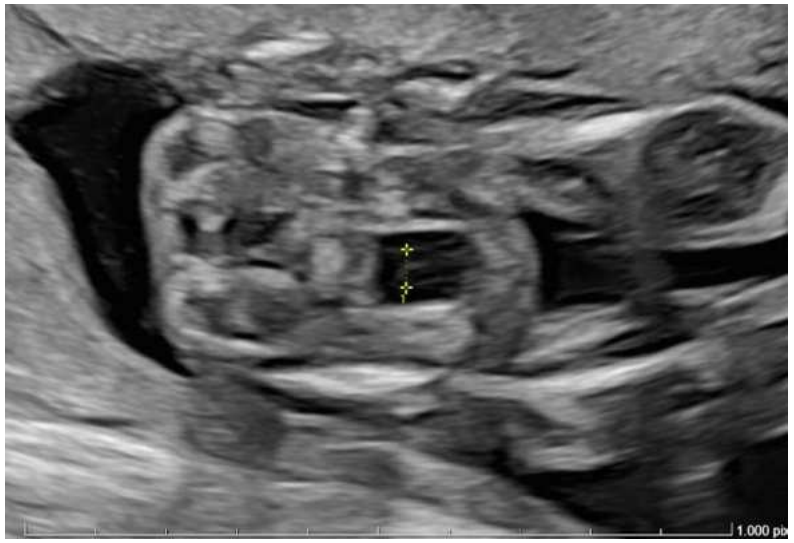


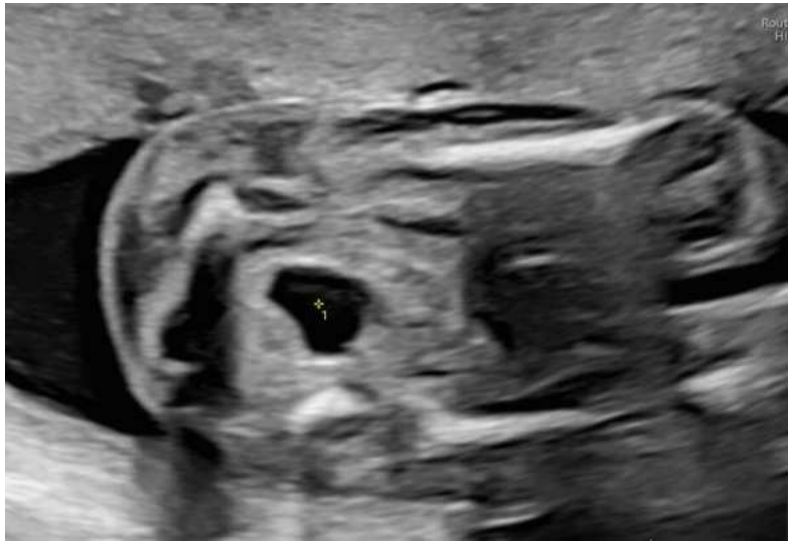
	PLANA	CÓNCAVA	
NIÑO	168	8	95,45%
NIÑA	34	148	81,32%
	83,17%	94,87%	

Diagnóstico prenatal y postnatal de ADS

Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs

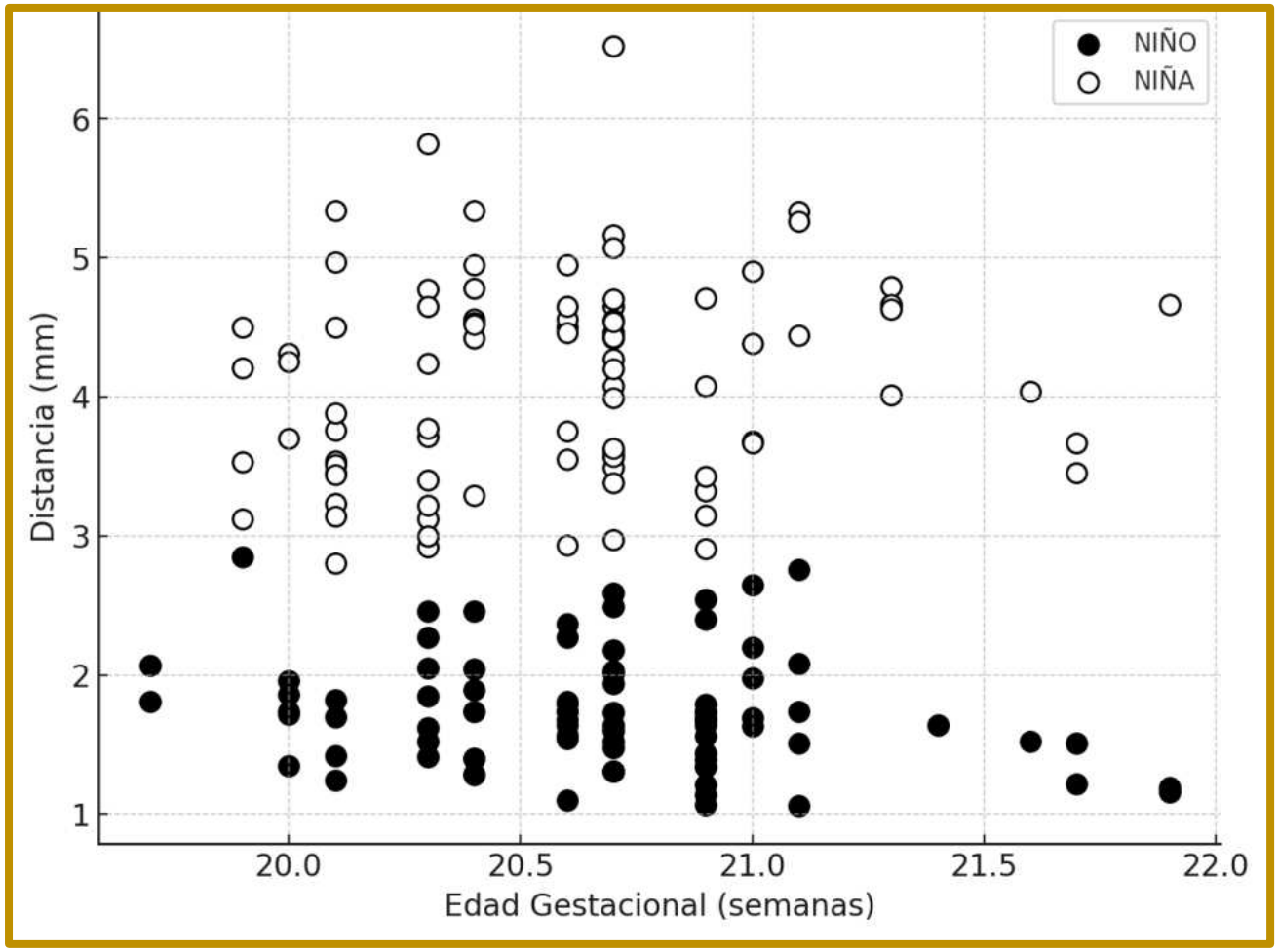


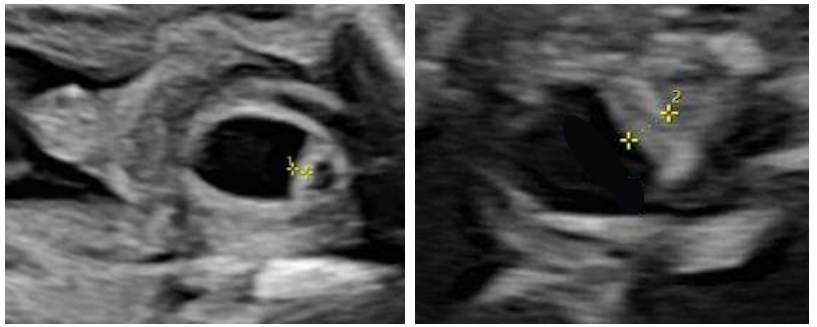




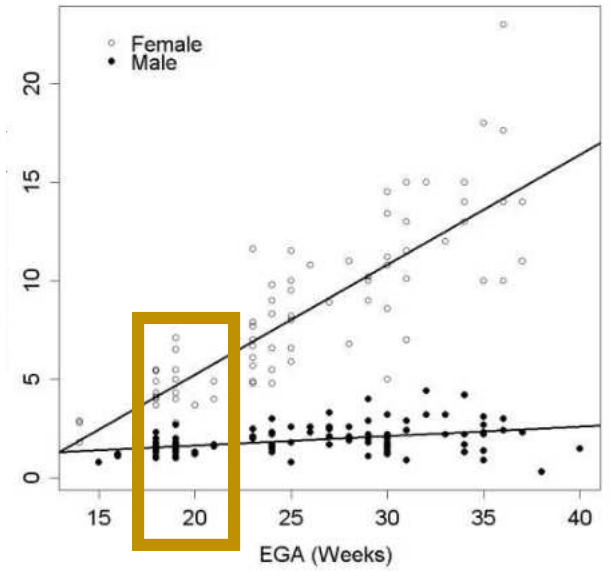
Diagnóstico prenatal y postnatal de ADS

Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs



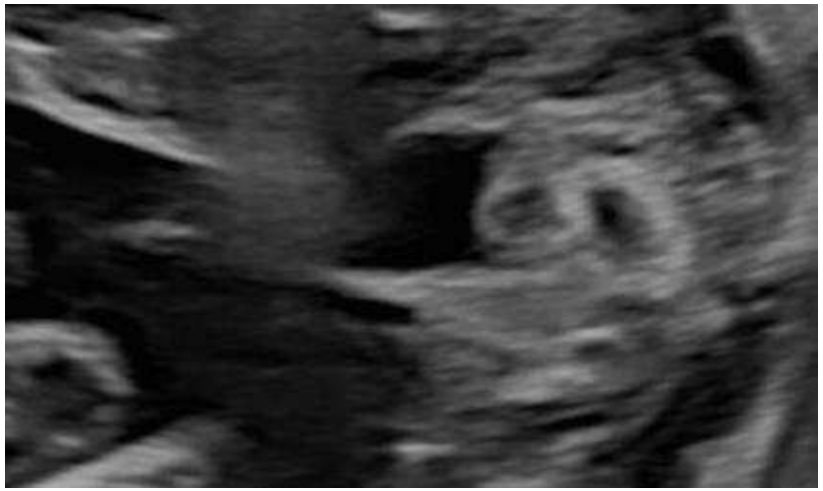


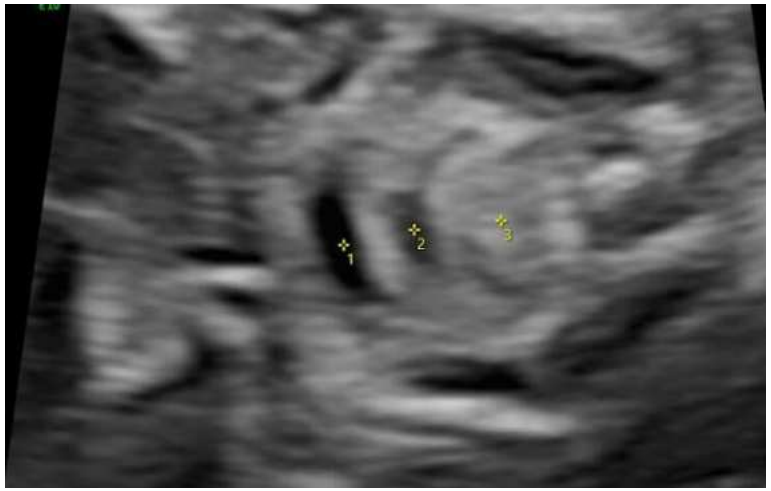
NIÑO	1,73mm (1,06 – 2,85)
NIÑA	4,06mm (2,33 – 7,05)



Diagnóstico prenatal y postnatal de ADS

Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs

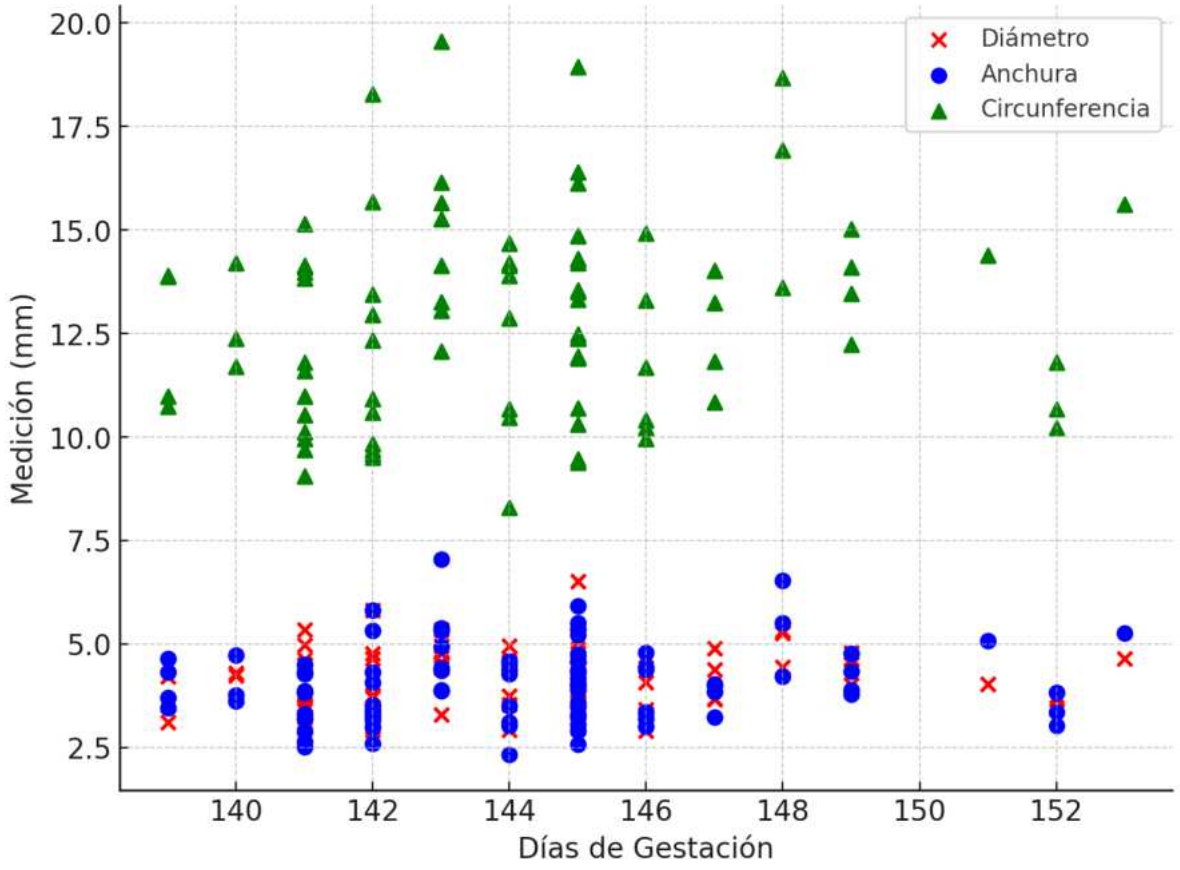


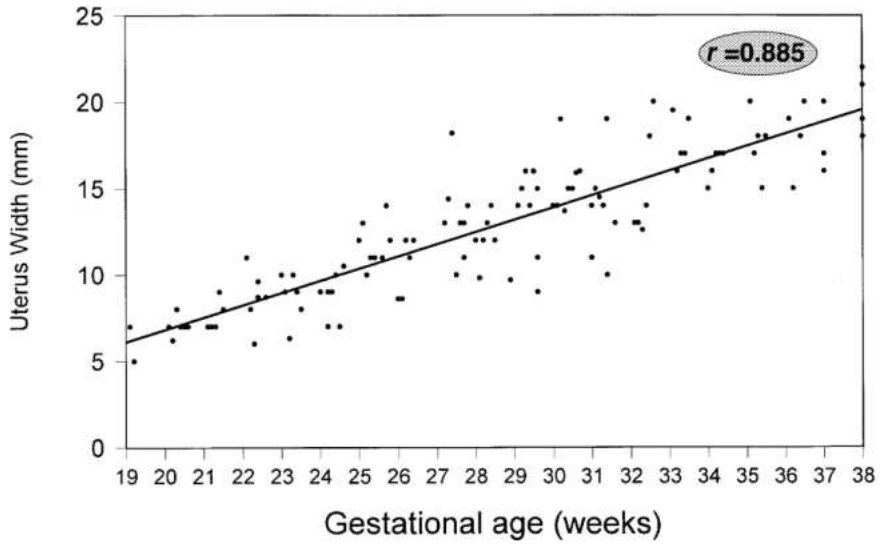


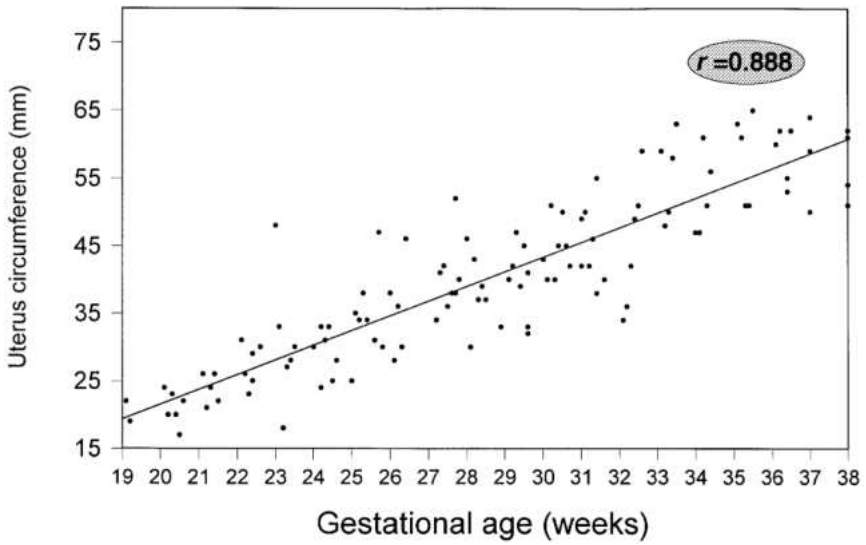
	CARTAGENA 2025	SORIANO 1999	JOUANNIC 2006	SMET 2023
ÚTERO	**96,7%**	77,8% *(19 – 38SG)*	45/85% 2D/VCI *(20 – 22SG)* 82/97% 2D/VCI *(32 – 34SG)*	36% *(20 – 22SG)* ≈100% *(>24SG)*
VAGINA	**85,7%**			≈100%

Diagnóstico prenatal y postnatal de ADS

Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs

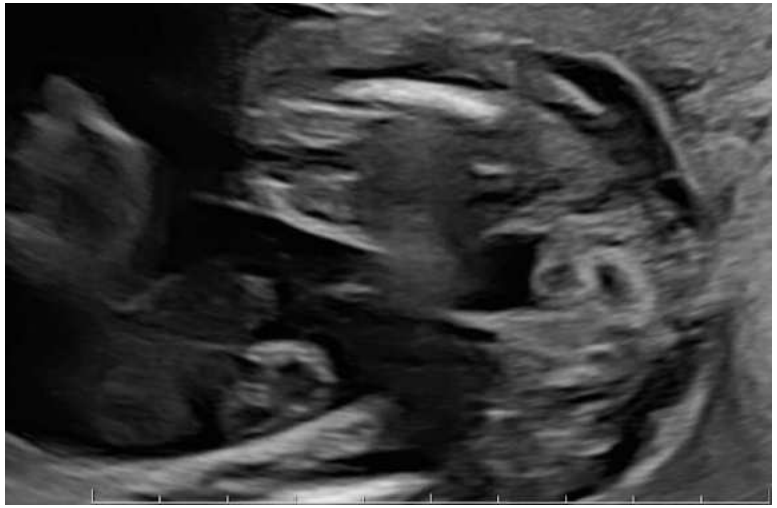
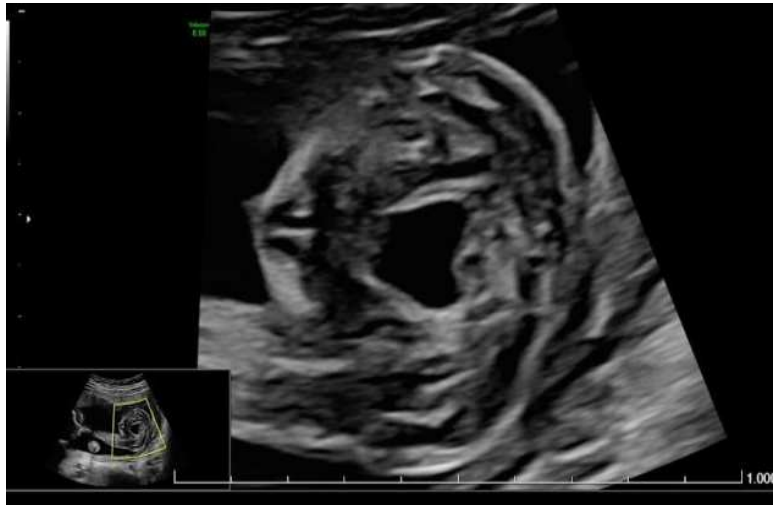


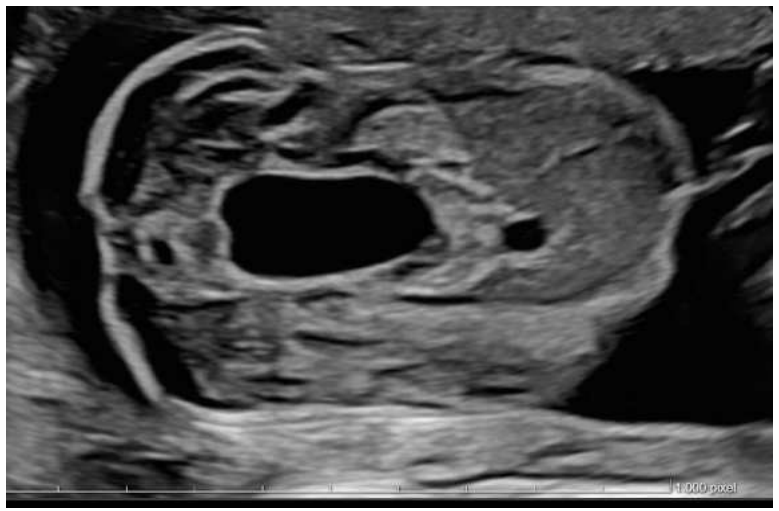
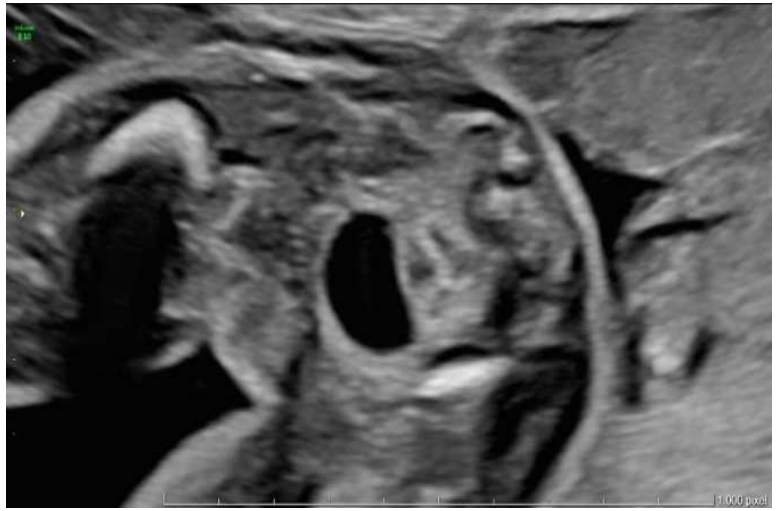




Diagnóstico prenatal y postnatal de ADS

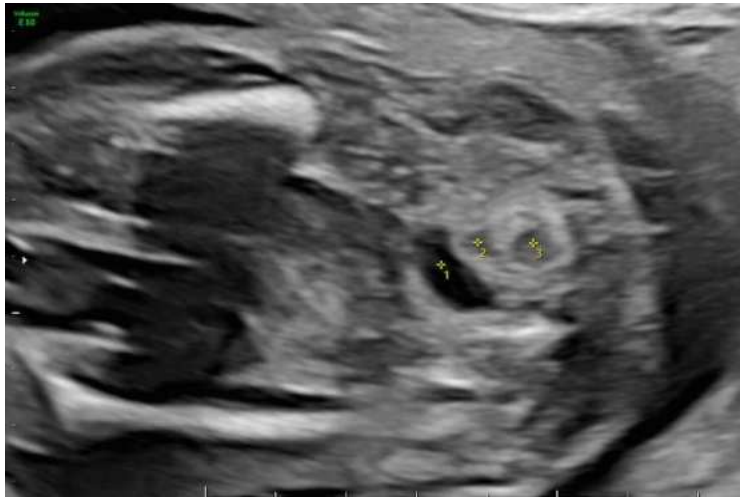
Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs

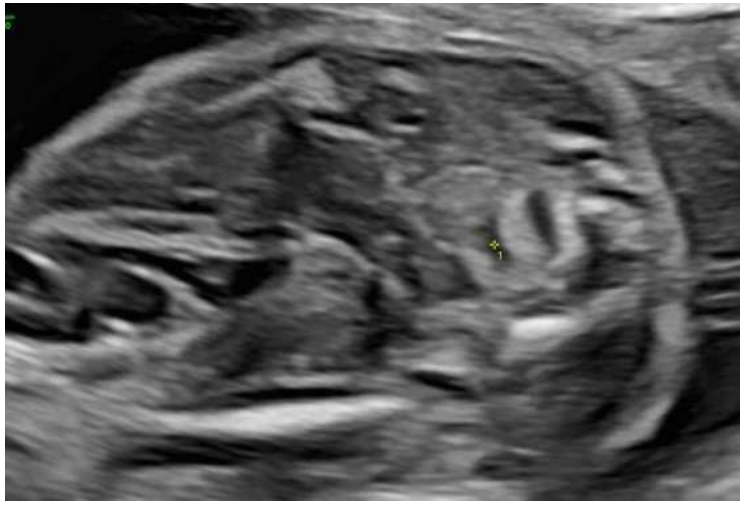



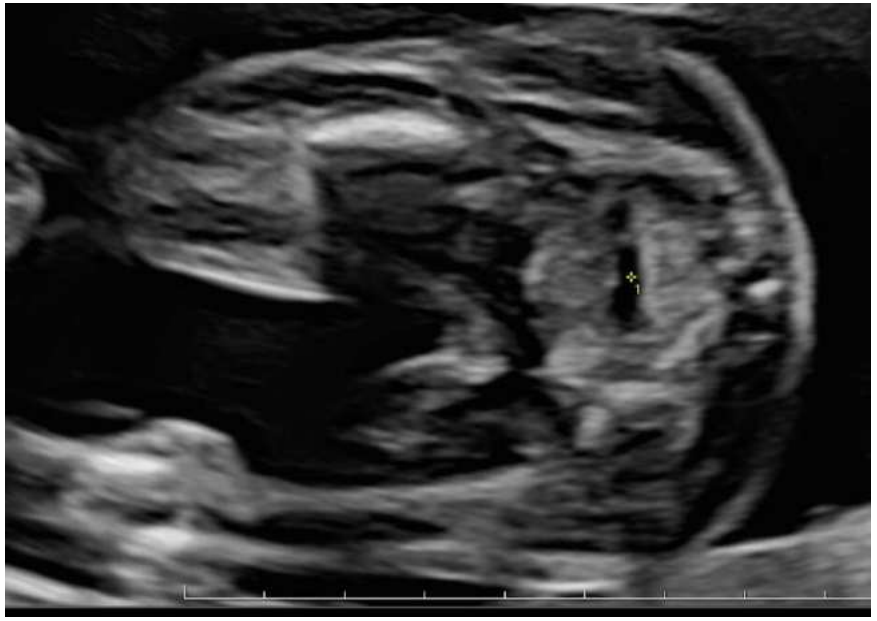




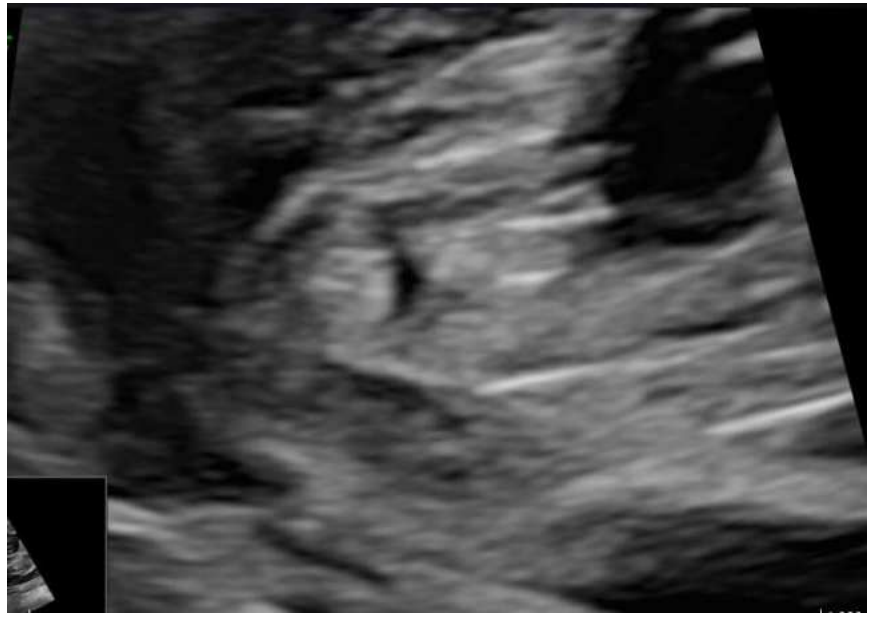
Diagnóstico prenatal y postnatal de ADS

Mid-Trimester Ultrasound Assessment of Female Internal Genitalia: Uterus, Vagina, and Indirect Signs









Conclusiones

XXXIII REUNION

SOCIEDAD DE OBSTETRICIA Y GINECOLOGIA DE LA REGION DE MURCIA

ANOMALÍAS DEL DESARROLLO SEXUAL (ADS)

DIAGNÓSTICO PRE Y POSTNATAL