

A congenital condition in which fiber-like bands from the amnion tangle around the developing fetus and impacts the normal growth of body parts by restricting blood flow. This results in congenital deformities and/or amputations that can affect any part of the body, although the limbs are most common.

A.K.A. amniotic band sequence, amniotic band disruption, constriction ring syndrome

PATHOPHYSIOLOGY

- Damage (rupture or tear) to inner lining of placenta, the amnion, which exposes the fetus to sticky amniotic bands that can attach to any part of the developing body.
- Type of abnormality dependent on stage of pregnancy and if blood supply to distal part of limb is disrupted.
- No known genetic predispositions for this condition.

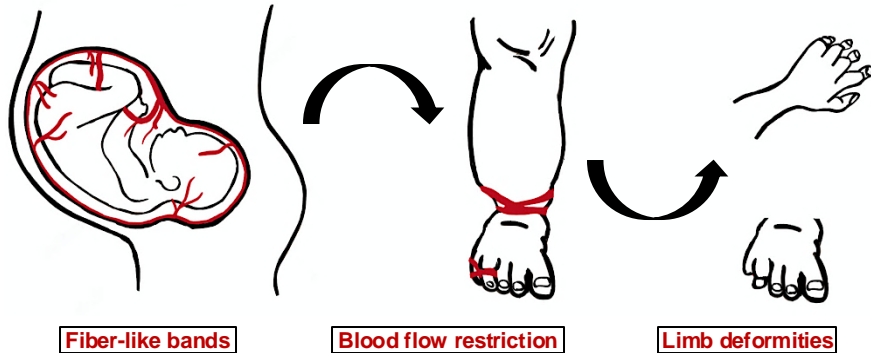
RISK FACTORS

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| <ul style="list-style-type: none"> Maternal drug use or illness Primiparity | <ul style="list-style-type: none"> Maternal and/or placental trauma or hemorrhage Amniocentesis | <ul style="list-style-type: none"> Prematurity Low birth weight |
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PRESENTATION

PHYSICAL EXAM

- Limb abnormalities:**
 - Constriction rings or grooves around fingers, toes, arms, or legs
 - Missing parts of limbs or limb deformities
- Facial deformities**
- Swelling or edema in body areas affected by constriction rings**



DIAGNOSIS

Postnatal (MOST COMMON):

- Clinical diagnosis at birth
- Presence of constricting bands & deformations of limbs or body distal to the bands

Prenatal:

- Routine U/S demonstrating echogenic thin bands attaching to both uterine lining & fetus
- Fetal limb asymmetry, amputation, or syndactyly

MANAGEMENT

Postnatal:

- Refer to a pediatric plastic surgeon for functional & aesthetic indications
- Occupational & physical therapy
- Prosthetic specialist if limb is lost

Prenatal:

- operative fetoscopy to release amniotic bands



Urgent surgical intervention indicated for life-threatening bands around the umbilical cord or bands compromising neurovascular integrity of limbs to prevent loss of function and/or need for amputation.

****Due to the heterogeneity in clinical manifestations of ABS, the nature and timing of surgical interventions should be tailored for each patient's presentation and functional needs.****

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