

Gestasyonel Trofoblastik Hastalıklarda risk belirleme yöntemleri

Risk assessment methods in Gestational Trophoblastic Diseases

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GTN

- Gestational trophoblastic neoplasia (GTN) refers to a group of malignant neoplasms that consist of abnormal proliferation of trophoblastic tissue, and may follow a hydatiform mole or a nonmolar pregnancy.
- **GTN** is comprised of the following histologic types:
 - ✓ **Invasive mole**
 - ✓ **Choriocarcinoma**
 - ✓ **Placental site trophoblastic tumor (PSTT)**
 - ✓ **Epithelioid trophoblastic tumor (ETT).**

THE 2002 CRITERIA FOR THE DIAGNOSIS OF POST HYDATIDIFORM MOLE TROPHOBLASTIC NEOPLASIA (GTN)

GTN may be diagnosed when the plateau of hCG lasts for 4 measurements over a period of 3 weeks or longer, that is days 1,7,14,21.

THE 2002 CRITERIA FOR THE DIAGNOSIS OF POST HYDATIDIFORM MOLE GTN

GTN may be diagnosed when there is a **rise of hCG** on three consecutive weekly measurements, over a period of two weeks or longer, days 1,7,14.

THE 2002 CRITERIA FOR THE DIAGNOSIS OF POST HYDATIDIFORM MOLE GTN

GTN is diagnosed if there is histologic
diagnosis of **choriocarcinoma**.

THE 2002 CRITERIA FOR THE DIAGNOSIS OF POST HYDATIDIFORM MOLE GTN

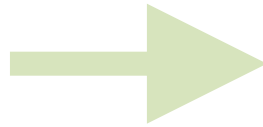
GTN is diagnosed when the **hCG** level remains elevated for **6 months or more**.

CRITERIA FOR METHODS USED TO DIAGNOSE METASTASES IN GTN

1. **Lungs** : Chest **x-ray**
2. **Liver** metastases may be diagnosed by **CT** scanning or by **ultrasound**. Contrast enhanced CT scanning is more accurate.
3. **Brain** metastases may be diagnosed by contrast enhanced **MRI** or **CT** scanning. MRI is more accurate.
4. To diagnose **intra-abdominal** metastases **CT** scanning is preferable to **ultrasound**.

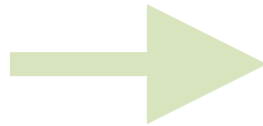
GTN – staging and prognostic risk scoring system

FIGO



Staging

WHO



PRS system

WHO Prognostic risk scoring system

**Clinical and biological
parameters**

FIGO STAGING OF GTN

- Stage I: Disease confined to the **uterus**
- Stage II: GTN extends **outside the uterus** but is limited to the genital structures (adnexa, vagina, broad ligament).
- Stage III: GTN extends to the **lungs** with or without genital tract involvement.
- Stage IV: All other metastatic sites.

WHO PRS system

4 points

0-1-2-4

8 parameter

- Age (year) (<40 , ≥ 40)
- Index pregnancy (MH, **abortus**, term)
- Pregnancy – disease interval (month) (<4 • $4 - <7$ • $7 - <13$ • ≥ 13)
- Serum hCG level (IU/L) ($<10^3$ • $10^3 - <10^4$ • $10^4 - 10^5$ • $\geq 10^5$)
- Greatest tumor size (cm) (<3 , **3-5**, ≥ 5)
- Site of metastasis (lung • **spleen, kidney** • GIS • **brain, liver**)
- Number of metastasis (0 • **1-4** • $5-8$ • **>8**)
- Failed chemotherapy (**single agent** – **multiagent**)

GTN- Prognostic risk scoring–FIGO 2000

FIGO Scoring				
Age				
Antecedent pregnancy				
Interval months from index pregnancy				
Pre-treatment serum hCG(IU/L)				
Largest tumor size (including uterus) cm				
Site of metastases				
Number of metastases				
Previous failed chemotherapy				

GTN- Prognostic risk scoring–FIGO 2000

FIGO Scoring	0	1	2	4
Age	<40	≥40		
Antecedent pregnancy	Mole	Abortus	Term	
Interval months from index pregnancy	<4	4 - <7	7 - <13	≥13
Pre-treatment serum hCG(IU/L)	<10 ³	10 ³ - <10 ⁴	10 ⁴ - <10 ⁵	≥10 ⁵
Largest tumor size (including uterus) cm	<3	3- <5 cm	≥5 cm	
Site of metastases	Lung	Dalak, böbrek	GİS	Beyin, karaciğer
Number of metastases	0	1-4	5-8	>8
Previous failed chemotherapy			Tek ilaç	İki veya daha fazla ilaç

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Number of metastases	0	1-4	5-8	>8
Previous failed chemotherapy			Single drug	İki veya daha fazla ilaç

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Previous failed chemotherapy			Tek ilaç	2 or more drugs

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Site of metastases	Lung	Spleen, kidney	Gastro-intestinal	Liver, Brain
Number of metastases	0	1-4	5-8	>8
Previous failed chemotherapy			Single drug	2 or more drugs

GTN –Prognostic risk scoring

FIGO Skoru	0	1	2	4
Yaş	<40	≥40		
Önceki gebelik	Mol Hidatidiform	Abortus	Term	
İndeks gebelikten sonraki aralık (ay)	<4	4 - 12		≥13
Tedavi öncesi serum hCG (IU/L)				≥10 ⁵
En büyük tümör boyutu dahil (cm)			≥5 cm	
Metastaz bölgesi		Dalak, böbrek	GIS	Beyin, karaciğer
Saptanan metastazların sayısı	0	1-4	5-8	>8
Önceki başarısız kemoterapi			Tek ilaç	İki veya daha fazla ilaç

Total score points

0 - 1 - 2 - 3 - 4 - 5 - 6

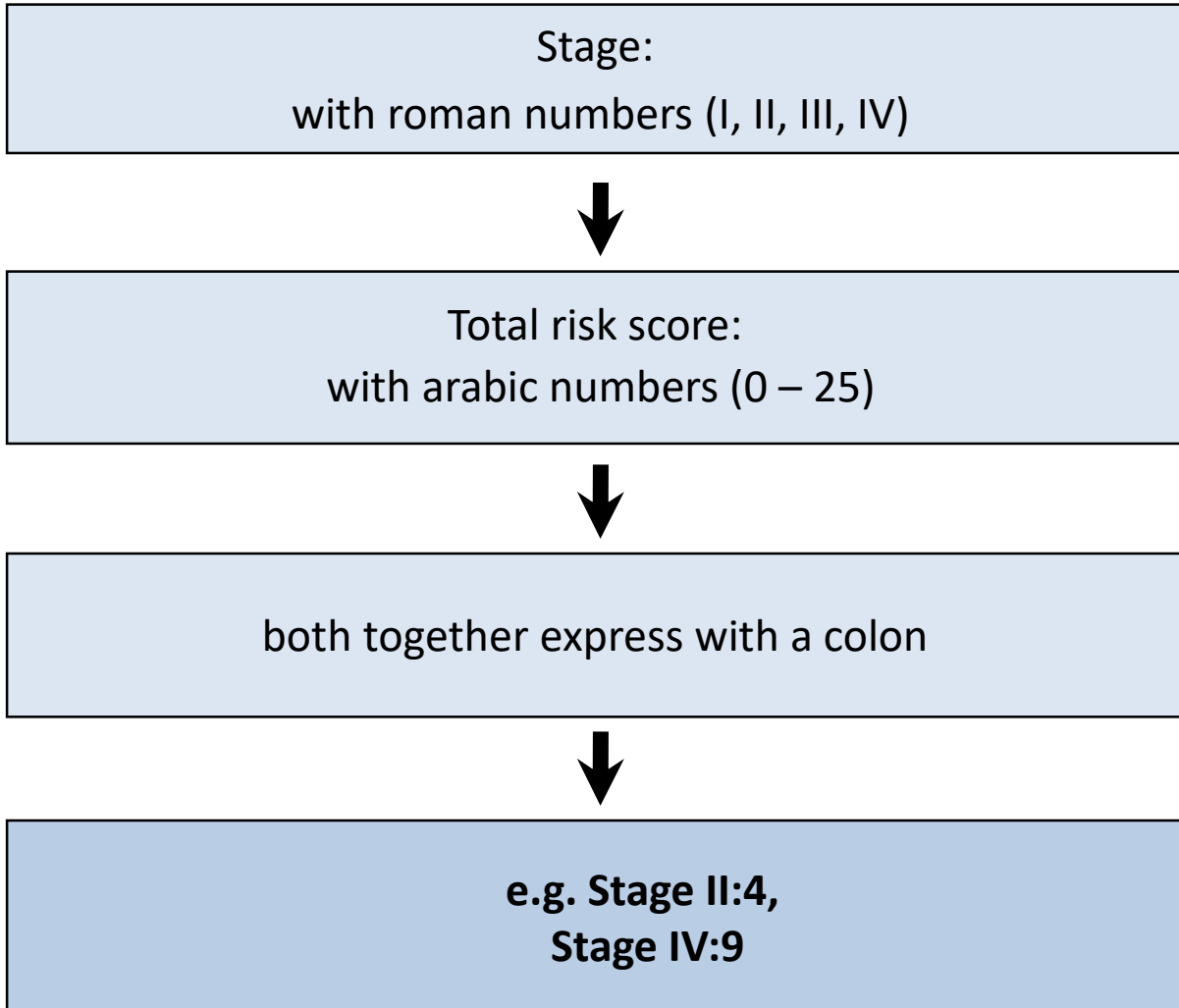
7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25

Low risk group

High risk group

Ultra high risk ≥ 13,

WHO – FIGO staging- risk scoring system



- The benefit of using the modified WHO Prognostic Scoring system applies primarily to **FIGO stages II and III**,
- since essentially all patients with **FIGO Stage I GTN are low risk**, and **>90 percent achieve remission with single-agent chemotherapy**.
- Furthermore, **patients with FIGO stage IV disease have high risk scores**, which indicate probable resistance to single-agent chemotherapy and the need for primary treatment with multi-agent chemotherapy to optimize outcomes.

- For patients with **PSTT or ETT** only **stage** would be given, since a risk factor score is not applicable, treatment is based on the FIGO Stage alone.

EXAMPLE OF LOW STAGE: LOW RISK FACTOR SCORE

- A 45 year old patient has a hydatidiform mole evacuated uneventfully. The hCG
- decreases from a pre-evacuation value of 80,000 mIU/ml to 1000 mIU/ml 4 weeks after the D&C but then persists between 800 and 1000 mIU/ml for 4 weeks. Clinical examination shows no abnormality or evidence of metastases. Ultrasound of the uterus shows a 2cm lesion in the myometrium. Chest X ray is negative. This patient is staged FIGO stage I : 2. The two risk factors present are the patient's age and the hCG of 1000 mIU/ml i.e. $10^3 - 10^4$. Each risk factor has a score of one.

EXAMPLE OF HIGH STAGE: HIGH RISK FACTOR SCORE

- A 41 year old patient has bleeding after her 3rd successful pregnancy. Curettage shows histologic choriocarcinoma. Ultrasound shows a 5 cm lesion in the myometrium and chest X ray shows multiple (more than 8) lung nodules, 1 to 2 cm in size. Brain MRI shows a 3 cm lesion in the right frontal lobe of the brain. This patient is staged FIGO IV:13 because she is aged 41 (1) and is post full term pregnancy (2), has a brain metastasis (4), has more than 8 metastases to the lung (4) and has a 5 cm lesion in the uterus (2). The histologic choriocarcinoma does not add to the risk score by the FIGO system.

Trofoblastik Hastalıklar Derneđi <http://trofoblast.org.tr/>