

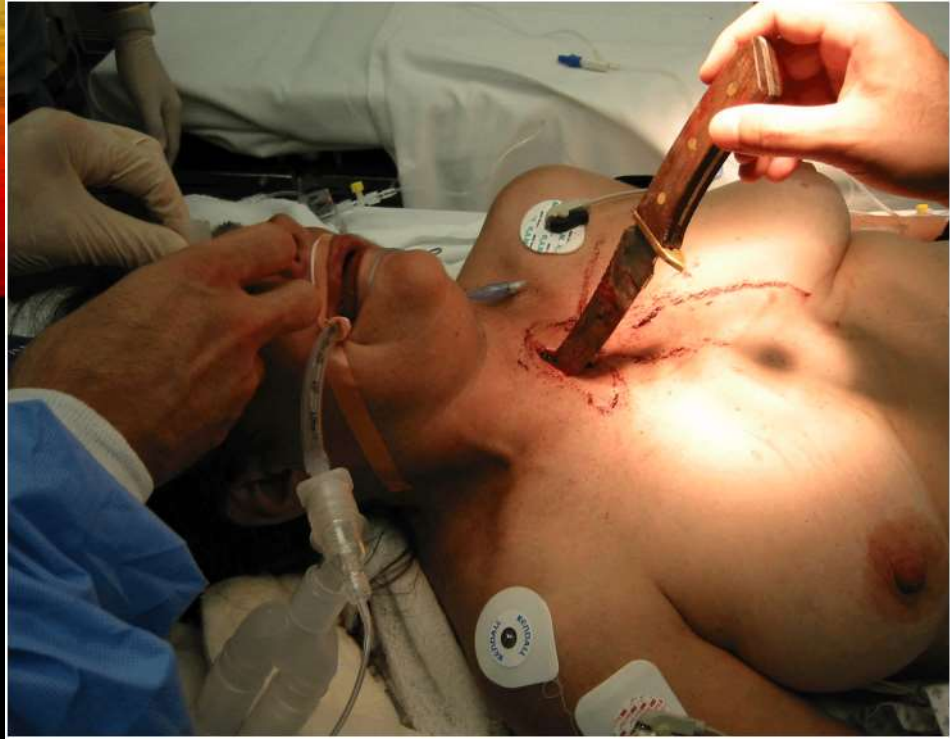
TRIASE

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DEFINISI

- Adalah pemilahan penderita menurut **beratnya keadaan gawat darurat**. Triase bukan mengobati, **hanya memilah** berdasarkan skala prioritas
- Proses menempatkan pasien GD pada tempat dan waktu yang tepat untuk mendapatkan perawatan yang tepat

PRINSIP DASAR

***Right** Patient to the
Right place at the
Right time with the
Right care provider*

KATEGORI

- **Non disaster:**
untuk memberikan perawatan terbaik untuk masing-masing pasien
- **Disaster :**
untuk memberikan perawatan terbaik untuk pasien dalam jumlah besar

ASPEK PENILAIAN

- **Primary Survey**

A : Airway, menjaga airway dengan kontrol servikal

B: Breathing, menjaga pernafasan dgn ventilasi

C : Circulation dengan kontrol perdarahan

D : Disability, evaluasi status neurologis

E : Exposure, kontrol lingkungan

AIRWAY with C-SPINE CONTROL

- ◆ Periksa jalan nafas → Obstruksi ? Total/parsial?
- ◆ Etiologi obstruksi : Fr.Maksilofacial, Fr.Laring/trachea
- ◆ **Ingat!** Lindungi vertebra servikal
- ◆ Korban dgn GCS <9
Motorik kacau } Airway definitif

C-SPINE

- C-spine injury happened in 10% pt with compromised airway
- Evaluation :
 - Physical examination
 - Radiographs : AP, lateral C-Cpine is 85% sensitive, CT-scan
- Diagnose of C-Spine injury + :
 - anatomic level , clinical severity & sacral sparing





Saat penanganan Airway dgn korban multiple trauma → lakukan dengan “*inline immobilisation*”

Ingat! Anggaplah ada Fr.Servikal pada setiap korban multiple trauma → imobilisasi leher sampai adanya Fr.Servikal dapat disingkirkan

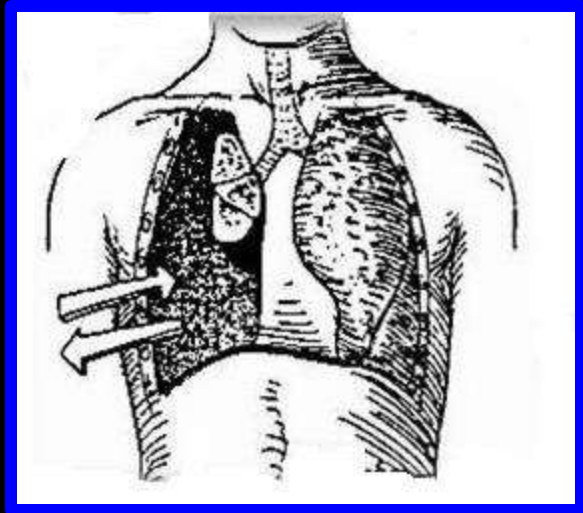
Lakukan re-evaluasi terus menerus

BREATHING dan VENTILASI

- ◆ Ventilasi akan baik bila → fungsi paru, dinding dada, dan diafragma dalam keadaan baik
- ◆ Lakukan : Inspeksi → simetris ? retraksi ?
 - Palpasi
 - Perkusi → sonor? simetris?
 - Auskultasi → Suara vesikuler? Simetris?

- ◆ Etiologi gangguan ventilasi berat :
Tension pneumothorax, flail chest
+ contusio pulmonum, dan open
pneumothorax
- ◆ Etiologi gangguan ventilasi ringan :
Hematothorax, simple pneumothorax,
Fr.Costa dll
- ◆ Lakukan re-assess terus menerus





CIRCULATION with HEMORRHAGE CONTROL



CIRCULATION with HEMORRHAGE CONTROL

- ◆ **Anggaplah!!** Hipotensi yang terjadi pada korban trauma adalah akibat *hipovolemia* → sampai terbukti sebaliknya
- ◆ 3 Gejala klinis yang menunjukkan keadaan hemodinamik (temukan dengan cepat) :
 1. Tingkat kesadaran
 2. Warna kulit (ingat! HKM)
 3. Nadi (kekuatan, kecepatan, dan irama)

Pulsasi arteri besar (-) → segera **Resusitasi!**

- ◆ Bila Eksternal / Internal bleeding (+)
→ *Stop bleeding!*
- ◆ Lakukan re-assess terus menerus

DISABILITY

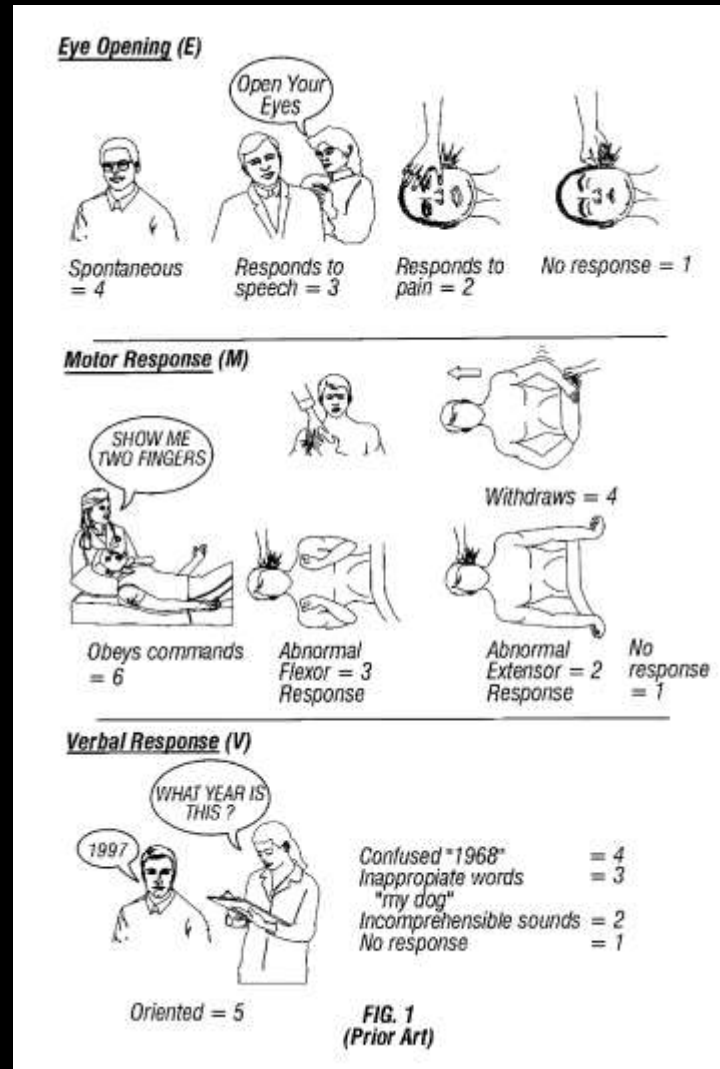
- ◆ Dilakukan evaluasi neurologis setelah **'ABC'** aman.
- ◆ Yang dinilai :
 1. Tingkat kesadaran
 2. Ukuran dan reaksi pupil

Tingkat kesadaran bisa dinilai dengan :

1. **AVPU** (*Alert, Vokal, Pain, Unresponsive*)
2. **GCS** (*Eye opening, Speech Rx, Motorik Rx*)

GLASGOW COMA SCALE

Glasgow Coma Scale (GCS)		
Eye Opening	Opens spontaneously	4
	Responds to verbal command	3
	Responds to pain	2
	No eye opening	1
Verbal	Oriented	5
	Disoriented	4
	Inappropriate words	3
	Incomprehensible speech	2
	No verbal response	1
Motor	Obeys commands	6
	Localizes to pain	5
	Withdraws to pain	4
	Flexion to pain (Decorticate posturing)	3
	Extension to pain (Decerebrate posturing)	2
	No motor response	1



EXPOSURE



EXPOSURE

◆ Untuk kepentingan pemeriksaan dan evaluasi korban

→ buka seluruh pakaian korban

◆ Jaga jangan sampai terjadi *hipotermia*, caranya :

1. gunakan selimut hangat

2. ruangan yang hangat

3. cairan iv sudah dihangatkan (39°C-40°C)

Ingat!! Pentingkan untuk mengatasi suhu korban.

Bukan rasa nyaman dokter/paramedis

RESUSITASI

◆ Lakukan resusitasi cepat dan tepat pada

→ 'ABCDE'

TAMBAHAN PRIMARY SURVEY

◆ **Meliputi :**

- 1. Monitor EKG**
- 2. Kateter urine dan lambung**
- 3. Monitoring hasil resusitasi
(T, N, RR, Temperatur, ABG, dan produksi urine)**
- 4. Pemeriksaan Rontgen**

KRITERIA

“Klasik”

VS

ESI (*EMERGENCY SEVERITY INDEX*)

KRITERIA

- “Klasik” :

P0 : Meninggal

P1 : Gawat Darurat

P2 : Tidak Gawat tapi Darurat

P3 : Tidak Gawat dan Tidak Darurat

KRITERIA

- ***Emergency Severity Index (ESI)***

Sistem triase berbasis bukti yang mengacu penuh pada kondisi pasien dan sumber daya yang diperlukan dalam menangani pasien tersebut.

- Penerapan ESI lebih mudah dilakukan oleh perawat triase
- Memberikan perencanaan yang baik terhadap pasien
- Penerapan mudah pada pasien pediatrik

KRITERIA

- ESI dibagi menjadi 5 level:

ESI 1: Merupakan pasien-pasien dengan kondisi yang mengancam jiwa (impending life/limb threatening problem) sehingga membutuhkan tindakan penyelamatan jiwa yang segera.

ESI 2: Merupakan pasien-pasien dengan kondisi yang berpotensi mengancam jiwa atau organ sehingga membutuhkan pertolongan yang sifatnya segera dan tidak dapat ditunda

ESI 3: Merupakan pasien-pasien yang membutuhkan evaluasi yang mendalam dan pemeriksaan klinis yang menyeluruh

ESI 4: Merupakan pasien-pasien yang memerlukan satu macam sumber daya perawatan IGD

ESI 5: merupakan pasien-pasien yang tidak memerlukan sumber daya.

Algoritma Triase Berdasarkan *Emergency Severity Index* (ESI) versi 4

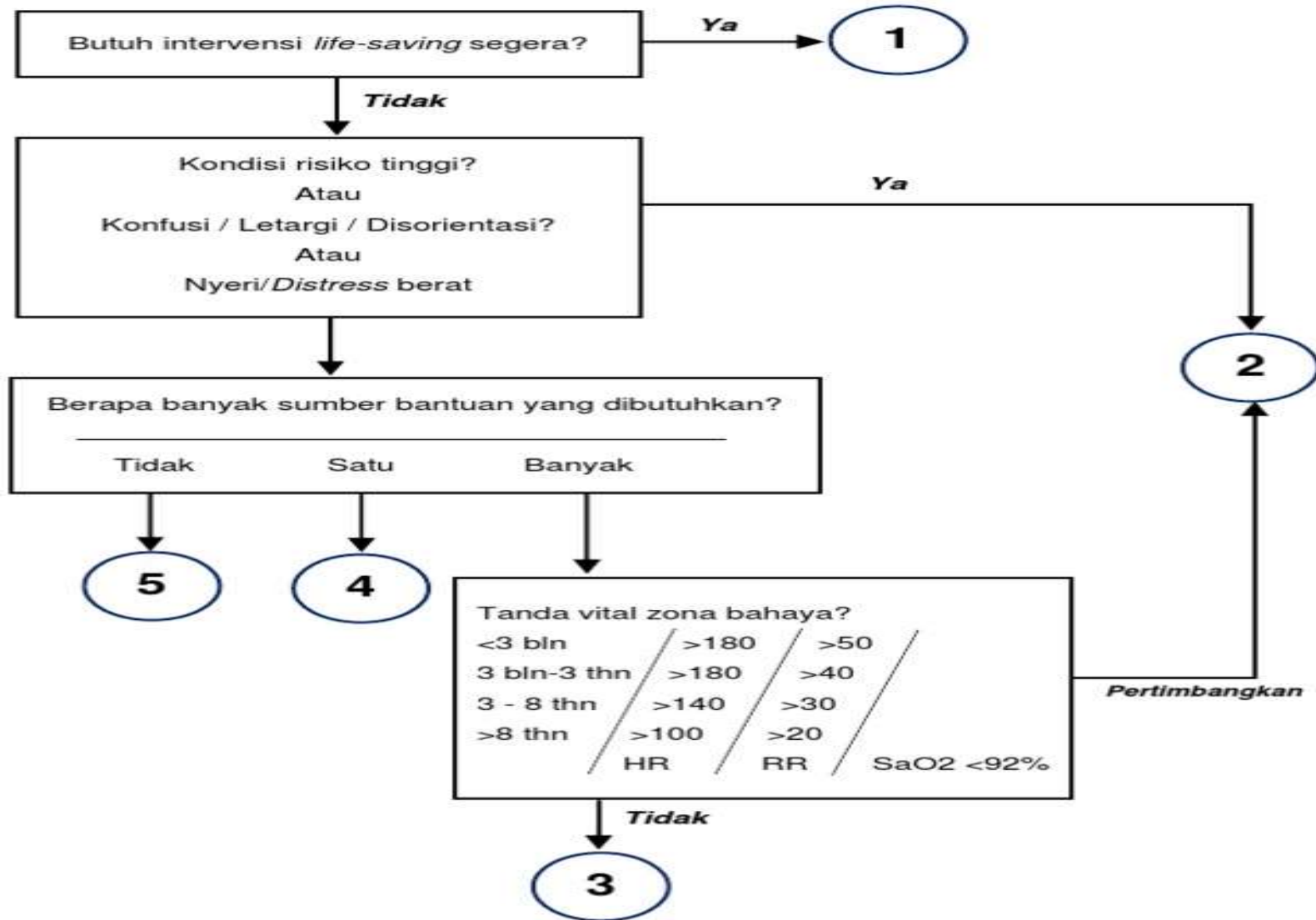


Table 4-1. Resources for the ESI Triage System

Resources	Not resources
Labs (blood, urine)	History & physical (including pelvic)
ECG, X rays CT-MRI-ultrasound angiography	Point-of-care testing
IV fluids (hydration)	Saline or heplock
IV, IM or nebulized medications	PO medications Tetanus immunization Prescription refills
Specialty consultation	Phone call to PCP
Simple procedure = 1 (lac repair, Foley cath)	Simple wound care (dressings, recheck)
Complex procedure = 2 (conscious sedation)	Crutches, splints, slings

Table 4-2. Examples of Resources for ESI Levels 3-5

Scenario

Right lower quadrant pain:
22-year-old male, right lower quadrant abdominal pain since early this morning, also nausea, and no appetite.

Left lower leg pain:
45-year-old obese female with left lower leg pain & swelling which started 2 days ago, after driving in a car for 12 hours.

Ankle injury:
Healthy, 19-year-old female who twisted her ankle playing soccer. Edema at lateral malleolus, hurts to bear weight.

Urinary tract infection symptoms:
Healthy, 29-year-old female with UTI symptoms, appears well, afebrile, denies vaginal discharge.

Poison ivy:
Healthy 10-year-old child with 'poison ivy' on extremities.

Prescription refill:

Table 4-2. Examples of Resources for ESI Levels 3-5

Scenario	Predicted Resources (ESI Resources in <i>italic</i>)	ESI Triage Category
Right lower quadrant pain: 22-year-old male, right lower quadrant abdominal pain since early this morning, also nausea, and no appetite.	<i>ESI Resources = 2 or more</i> Exam <i>Laboratory studies</i> <i>IV fluid</i> <i>Abdominal CT</i> <i>(possible) Surgery Consult</i>	3
Left lower leg pain: 45-year-old obese female with left lower leg pain & swelling which started 2 days ago, after driving in a car for 12 hours.	<i>ESI Resources = 2 or more</i> Exam <i>Laboratory studies</i> <i>Lower extremity non-invasive vascular studies</i> <i>(possible) Anticoagulant therapy</i>	3
Ankle injury: Healthy, 19-year-old female who twisted her ankle playing soccer. Edema at lateral malleolus, hurts to bear weight.	<i>ESI Resources = 1</i> Exam <i>Ankle x-ray</i> Ace wrap Crutch-walking instruction	4
Urinary tract infection symptoms: Healthy, 29-year-old female with UTI symptoms, appears well, afebrile, denies vaginal discharge.	<i>ESI Resources = 1</i> Exam <i>Urine & urine culture</i> <i>(possible) Urine hCG</i> Prescriptions	4
Poison ivy: Healthy 10-year-old child with 'poison ivy' on extremities.	<i>ESI Resources = none</i> Exam Prescription	5

REFERENCE

- American College of Emergency Physicians (2003). Clinical policy for children younger than 3 years presenting to the emergency department with fever. *Ann Emerg Med.* 43(4):530-545.
- Australasian College for Emergency Medicine (2000) The Australasian Triage Scale. Retrieved June 6, 2011, from http://www.acem.org.au/media/policies_and_guidelines/P06_Aust_Triage_Scale_-_Nov_2000.pdf.
- Australasian College for Emergency Medicine (2000). Guidelines for the Implementation of the Australasian Triage Scale in Emergency Departments. Retrieved June 6, 2011, from <http://www.acem.org.au/infocentre.aspx?docId=59>
- Baraff LJ (2000) Management of fever without source in infants and children. *Ann Emerg Med.* 36:602-614.
- Baraff LJ, Bass JW, Fleisher GR, Klein JO, McCracken GH, Powell KR, Schriger DL (1993). Practice guideline for the management of infants and children 0 to 36 months of age with fever without source. *Ann Emerg Med.* 22:1198-1210.
- Beveridge R., Clarke B, Janes L, Savage N, Thompson J, Dodd G, ... Vadeboncoeur, A. (2002). Implementation guidelines for the Canadian Emergency Department Triage and Acuity Scale (CTAS). Retrieved June 7, 2011, from <http://www.caep.ca/template.asp?id=98758372CC0F45FB826FFF49812638D>

Cooper R., Flaherty H, Lin E, Hubbell K (2002). Effect of vital signs on triage decisions. *Ann Emerg Med.* 39:223-232.

Gilboy N, Tanabe P, Travers DA, Eitel DR, Wuerz RC (2003). The Emergency Severity Index Implementation

Handbook: A Five-Level Triage System. Des Plaines, IL: Emergency Nurses Association.

Rangel-Frausto M, Pittet D, Costigan M, Hwang T, Davis C, Wenzel R (1995). The natural history of the systemic inflammatory response syndrome (SIRS): A prospective study. *JAMA.* 273:117-123.

Stedman's Medical Dictionary (26th ed) (1995). Baltimore:Williams & Wilkins.

Wuerz R, Milne LW, Eitel DR, Travers D, Gilboy N (2000). Reliability and validity of a new five-level triage instrument. *Acad Emerg Med,* 7(3):236-242.

Wuerz R, Travers D, Gilboy N, Eitel DR, Rosenau A, Yazhari R (2001). Implementation and refinement of the emergency severity index. *Acad Emerg Med,*



TERIMA KASIH