

## Background:

- The causes of hospitalization may provide important information on the
  - **course of diseases** and
  - **treatment-related adverse effects.**

## Aim:

- To determine the
  - ✓ **causes** and
  - ✓ **outcome**
 of hospitalizations among patients with Behçet Syndrome (BS) in a dedicated center.

## Methods:

- We surveyed hospitalization records in our clinic between **January 2002** and **December 2019** and identified those with a diagnosis of BS.
- The records of these patients were reviewed for
  - ✓ **Demographic and clinical features**
  - ✓ **Causes of hospitalization and**
  - ✓ **Outcome**
- We divided hospitalization causes into 2 groups as being:
  - **BS related** (organ involvement or deterioration) and
  - **Non-BS related** (treatment complication or others).

## Results-1:

- Four-hundred and fourteen** BS patients (76% men, mean age  $37.4 \pm 11.6$  years) were hospitalized for a total of **536 times** during **18 years.**
- ✓ The median disease duration (IQR): **7 (11) years.**
- ✓ N of pts using immunosuppressives (IS) ± corticosteroids (CSs): **341 (64%)**
- ✓ N of pts using biologics: **78 (15%)**
- ✓ The mean duration of hospitalization: **12.7±10.4 days**

## Results 4:

- Three** patients died during hospitalization:
  - ❖ **Malignancy**
  - ❖ **Infection**
  - ❖ **Right heart failure due to pulmonary artery thrombosis and pulmonary hypertension**

## CONCLUSIONS:

- Vascular involvement** is the leading cause of hospitalization among BS patients, followed by infections.
- The predominance of men among hospitalized patients underlines the relatively severe course of BS in men.

## Limitations:

- Retrospective design
- Inclusion of patients who were hospitalized only in the rheumatology unit

## Results-2:

- N of pts hospitalized with BS/non-BS related reasons: 313 (58%)/232 (43%) (**Table**)
- Nine patients were hospitalized for both reasons at the same time.
- The most common reasons:
  - **Vascular involvement** (n=198, 37%) for BS related reasons and
  - **Infections** (n=80, 15%) for non-BS related reasons

Table-Distributions of BS related and non-BS related reasons of hospitalizations

Causes of hospitalizations (per hospitalization)	BS related reasons (n of hospitalizations=304)*	Non-BS related reasons (n of hospitalizations=232)*
	Vascular inv. (n=198, 65 %)	Infection (n=80, 34%)
	Pulmonary artery inv. (n=73, 24 %)	Pneumonia (n=22, 9%)
	Deep vein thrombosis (n=41, 13 %)	Tuberculosis (n=9, 4%)
	Budd-Chiari synd. (n=32, 11%)	Urinary tract inf (n=8, 3%)
	Vena cava inf. thrombosis (n=19, 6 %)	Gastroenteritis (n=5, 2%)
	Peripheral artery inv. (n=18, 6 %)	Osteomyelitis (n=3, 1%)
	Vena cava sup. thrombosis (n=15, 5 %)	Septic arthritis (n=3, 1%)
	Aorta inv. (n=17, 6%)	Aspergillosis (n=2, 1%)
	Coronary artery inv. (n=4, 1 %)	Nocardia (n=1, 1%)
		Salmonella (n=1, 1%)
		Others (n=29, 13%)
	Neurologic inv. (n=64, 21 %)	Drug side effects other than infections (n=37, 16 %)
	Parenchymal inv. (n=50, 16%)	Interferon (n=11, 5%)
	Dural sinus thrombosis (n=14, 5%)	Azathioprine (n=10, 4%)
		Cyclosporine (n=5, 2%)
		Steroid (n=4, 2%)
		TNF antagonists (n=3, 1%)
		Cyclophosphamide (n=1, 0,4%)
		Others (n=2, 1%)
	GI inv. (n=23, 8%)	Additional rheumatologic diseases (n=17, 7%)
	Joint inv. (n=13, 4%)	Renal disease (n=17, 7 %)
	Mucocutaneous inv. (n=13, 4%)	Cardiovascular dis. (n=14, 6%)
	Eye inv. (n=9, 3%)	Avascular necrosis (n=6, 3%)
	Others (n=6, 2%)	Malignancy (n=12, 5%)
		Others (n=47, 20%)

\*Some patients were hospitalized more than one times and for both BS related and non-BS related reasons at different time and had more than one type of BS related and/or non-BS related reasons.

## Results-3:

- Comparison of BS vs. non-BS related reasons:
  - **Young age** ( $34.7 \pm 10.6$  vs  $41.1 \pm 12.4$ ,  $p=0.006$ ),
  - **Short disease duration** ( $7.1 \pm 7.3$  vs.  $11.6 \pm 9.5$  years,  $p<0.001$ )
  - **Short hospital duration** ( $11.5 \pm 8.2$  vs  $14.1 \pm 12.9$  days  $p<0.001$ )
  - **Less use of IS±CSs** (59% vs 70%,  $p=0.01$ )
- No differences in
  - ❑ **Gender distribution** (232M/72F vs.166M/57F)
  - ❑ **Use of biologic agents** (14% vs 15%)