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## BESNIER'S PRURIGO AND URTICARIA IN A BRONCHIAL ASTHMA MATERIAL

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Several investigations have been made in order to show some relationship between bronchial asthma and other diseases. The main subject has been other allergic diseases or different infections that may act as foci.

Manifestations of the skin are according to *Baagøe* (1936) very common. There were in 124 bronchial asthma patients, 15 % with Besnier's prurigo and 28 % with strophulus or urticaria. *Baagøe* (1949) is of the opinion that there is a close connexion between Besnier's prurigo and an allergic constitution. The most important etiological factor is according to American literature foods but *Feinberg* and *Nexmand* have pointed out the essential rôle of airborne allergens.

Bronchial asthma and urticaria belong to the chief manifestations of atopic hypersensitivity (*Raffel* 1953). It would be useful to know how often and under which circumstances they are combined.

### MATERIAL

The material consists of 378 patients, 136 men and 242 women, with bronchial asthma. They were treated in the Medical Clinic II, S:t Görans Hospital Stockholm, Sweden, in 1949-1955. In order to get a general view of the age distribution, the onset of the bronchial asthma has been compared with the population pyramid of 1950. See fig. 1.

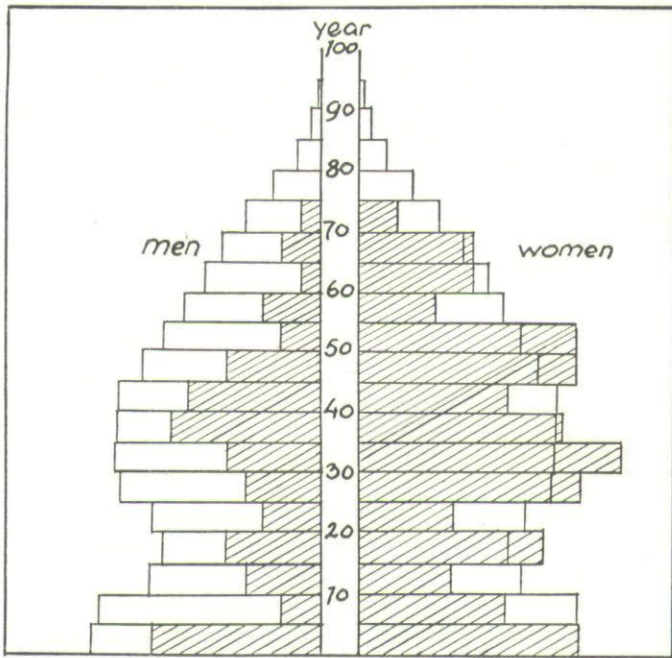


Fig. 1.

The distribution of age for the onset of bronchial asthma compared with the pyramid of the population in Sweden 1950.

- 0.5 mm = 1000 inhabitants/1 year.  
 ▨ 0.8 mm = 1 patient with bronchial asthma/5 years.

As is seen in fig. 1 the onset of the bronchial asthma very closely follows the pyramid and this occurs in both sexes. There are twice as many women as men.

#### BRONCHIAL ASTHMA AND BESNIER'S PRURIGO

*Fromer* (1954) says about Besnier's prurigo: "it is a constitutional disorder with allergic, dermatologic and psychosomatic aspects". *Sabouraud* (1911) was of the opinion that Besnier's prurigo and cutaneous lesions very often were combined with bronchial asthma and put forward a special diagnose: prurigo-asthma. *Rasch* (1913) says that there are cu-

taneous lesions in 5 out of 30 children. Different investigators have found very differing values on the incidence of Besnier's prurigo together with bronchial asthma; *Engel, Hågström & Salén* (1934) had 2.5 % out of 70 patients; *Urbach* (1940) 5.1 % of 452 patients (43 % men and 57 % women); *Baagøe* (1949) 8.6 % of 1000 patients with bronchial asthma. *Norrlind* (1946) had in his material 46 men and 54 women, in both sexes the diagnoses often were combined with bronchial asthma.

In the material of 378 bronchial asthma patients were 17 patients with Besnier's prurigo. They are listed in table 1. In this also is shown the relationship between the onset of the bronchial asthma and that of Besnier's prurigo and the correlation to extrinsic antigens, such as dust, animal dander, pollen, and the like, by which the disease is elicited, proved through intradermal and provocation tests.

As is seen in table 1 there are 8 women and 9 men out of 378 bronchial asthma patients with the diagnosis Besnier's prurigo. That means 4.5 %. The value is in agreement with that of *Urbach* (1940): 5.1 %. In this material there is a preponderance for men who have a combined diagnoses because there are twice as many women as men in the total. This does not agree with the sex distribution in the Besnier's prurigo material of *Norrlind* (1946).

Extrinsic antigens have been shown to be of importance for the asthma in 7 out of 9 men and in 6 out of 8 women of the cases where the diagnosis of bronchial asthma was combined with that of Besnier's prurigo.

In men the onset of the Besnier's prurigo was in 8 cases (between 2 and 12 years) before that of the bronchial asthma, in women 4 (between 3 and 19 years) of 8 respectively. One woman had her onset of bronchial asthma at the age of two years, and the Besnier's prurigo began 33 years later; another woman who got her Besnier's prurigo at the age of 62 years, developed asthma at 46 years old, and cholelithiasis was diagnosed 3 years later. The other 16 patients had their onset of bronchial asthma before the age of 20 years.

TABLE I  
Occurrence of Besnier's prurigo in the bronchial asthma.

| Sexes                                 | ♂       |   |   |   | ♀     |    |   |    |
|---------------------------------------|---------|---|---|---|-------|----|---|----|
|                                       | A       |   | B |   | A     |    | B |    |
|                                       | X       | Y | X | Y | X     | Y  | X | Y  |
| Onset of<br>bronchial asthma<br>(age) |         |   |   |   |       |    |   |    |
| 0-5                                   | 2,3,4,n |   | 2 |   |       | 33 |   |    |
| 6-10                                  |         |   | 4 |   | 3,6,6 | 0  |   |    |
| 11-15                                 | 12      | 5 |   |   |       |    |   |    |
| 16-20                                 | 12      |   |   |   | 19    |    |   | 13 |
| 21-25                                 |         |   |   |   |       |    |   |    |
| 26-30                                 |         |   |   |   |       |    |   |    |
| 31-35                                 |         |   |   |   |       |    |   |    |
| 36-40                                 |         |   |   |   |       |    |   |    |
| 41-45                                 |         |   |   |   |       |    |   |    |
| 46-                                   |         |   |   |   |       |    |   | 16 |
| Σ                                     | 7       |   | 2 |   | 6     |    | 2 |    |
| Σ                                     |         | 9 |   | 8 |       |    |   |    |

A = Bronchial Asthma where extrinsic antigens had proved to be of importance.

B = Bronchial Asthma where *no* extrinsic antigens had proved to be of importance.

X = Onset of Besnier's prurigo in years *before* that of the bronchial asthma.

Y = Onset of Besnier's prurigo in years *after* that of the bronchial asthma.

0 = Onset at the same time.

n = Not known but before the onset of the bronchial asthma.

2,3, - - 33 mean years after or before the onset of the bronchial asthma.

TABLE 2  
Occurrence of Urticaria in the bronchial asthma.

| Sexes                                 | ♂   |    |    |          |    |   | ♀      |    |       |         |   |      |
|---------------------------------------|-----|----|----|----------|----|---|--------|----|-------|---------|---|------|
|                                       | A   |    |    | B        |    |   | A      |    |       | B       |   |      |
|                                       | X   | Y  |    | X        | Y  |   | X      | Y  |       | X       | Y |      |
| Onset of<br>bronchial asthma<br>(age) |     |    |    |          |    |   |        |    |       |         |   |      |
| 0-5                                   | 3,n | 0  | 20 |          |    | 6 | 2      | 00 | 10,20 | n       |   |      |
| 6-10                                  |     | 00 |    |          |    |   | n      |    | 1,10  |         |   |      |
| 11-15                                 |     |    |    |          |    |   |        |    |       |         |   |      |
| 16-20                                 | n   |    | 17 |          |    |   | 9      |    |       |         |   |      |
| 21-25                                 |     |    |    |          |    |   | n      |    | 1,5   | 0       |   |      |
| 26-30                                 |     |    |    |          |    |   |        |    |       | 0       |   |      |
| 31-35                                 | n   |    |    | 21,n     | 24 |   | n      | 0  | 10    | 15      |   |      |
| 36-40                                 | 15  |    |    |          | 2  |   |        |    |       | 1       |   | 1,17 |
| 41-45                                 |     |    |    |          |    |   | n      |    |       | 4,n     |   |      |
| 46-                                   |     |    |    | 19,n,n,n |    |   | 30,n,n |    |       | 5,3,n,n |   | 10   |
| Σ                                     |     | 10 |    |          | 9  |   |        | 19 |       |         |   |      |
| Σ                                     |     |    |    | 19       |    |   |        |    |       | 14      |   |      |
| Σ                                     |     |    |    |          |    |   |        |    |       | 33      |   |      |

A = Bronchial Asthma where extrinsic antigens had proved to be of importance.

B = Bronchial Asthma where *no* extrinsic antigens had proved to be of importance.

X = Onset of urticaria in years *before* that of the bronchial asthma.

Y = Onset of urticaria in years *after* that of the bronchial asthma.

0 = Onset at the same time.

n = Not known but in all cases before the onset of the bronchial asthma.

1,2,--30 mean years after or before the onset of the bronchial asthma.

## BRONCHIAL ASTHMA AND URTICARIA

*Fromer* (1954) says about urticaria: "fundamental advances in our knowledge of this disturbance are lacking". *Urbach* and *Gottlieb* (1946) were of the opinion that there is allergic and non-allergic urticaria; *Cooke* (1947) meant that all urticaria is allergic but that it is often difficult to prove it. This difficulty has also been pointed out by *Schwartz* (1952).

The occurrence of urticaria in otherwise healthy persons differs between 12.8 % (*Rivière* 1932) and 1.4 % (*Baagøe* 1936). In the material of 378 cases of bronchial asthma we had 52 cases with urticaria. These patients are reported in table 2.

Table 2 shows that 18 men and 33 women have had the diagnosis urticaria, that means 13.4 % in total; 13.2 % for men and 13.6 for women. The percentage is very high, and no sex seems to have a special disposition for urticaria in combination with bronchial asthma. This is in good agreement with the observation of *Catsch* (1943) when he showed that in a normal material the incidence of urticaria in men were 9.5 % and in women 8.1 %. In the material there are only 15 cases out of 52 where the urticaria occurred after the asthmatic onset.

## SUMMARY

Besnier's prurigo has occurred in 4.5 % of an bronchial asthma material. A greater predominance exists for Besnier's prurigo to occur in patients with their bronchial asthma beginning before 20 years age.

In this material more often men have both of the diagnoses combined and in both sexes, cases predominate where extrinsic antigens were of importance.

Urticaria has occurred in 13.4 % in a bronchial asthma material. The distribution was equal in both sexes.

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