

# **INTRODUCTION**

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## INTRODUCTION

In an attempt to classify the adrenocorticosteroids one may divide them broadly into allopregnane and 4-pregnene compounds, as well as on the basis of their oxygen contents,

### Allopregnane compounds :

C<sub>21</sub>O<sub>5</sub> group comprises :

Substance A : allopregnane - 3 $\beta$ , 11 $\beta$ , 17 $\alpha$ , 20 $\beta$ , 21-pentol.

Substance C : allopregnane - 20-one-3 $\alpha$ , 11 $\beta$ , 17 $\alpha$ , 21- tetrol.

Substance D : allopregnane - 11,20-dione -3 $\beta$ , 17 $\alpha$ ,21- triol.

Substance V : allopregnane -20-one- 3 $\beta$ , 11 $\beta$ , 17  $\alpha$  ,21- tetrol.

C<sub>21</sub>O<sub>4</sub> group comprises :

Substance P : allopregnane -20-one -3 $\beta$ , 17 $\alpha$ , 21-triol

Substance K : allopregnane -3 $\beta$ , 17  $\alpha$  , 20 $\beta$ , 21-tetrol.

Substance R : allopregnane -20 - one- 3 $\beta$ , 11 $\beta$ , 21-triol.

Substance N : allopregnane - 11,20- dione -3 $\beta$ , 21-triol.

C<sub>21</sub>O<sub>3</sub> group comprises :

Substance J: allopregnane - 3 $\beta$ , 17  $\alpha$  ,20 $\beta$ -triol.

Substance O: allopregnane - 3 $\beta$ , 17  $\alpha$  ,20 ~~$\alpha$~~ -triol.

Substance L: allopregnane - 20-one -3 $\beta$ , 17 $\alpha$  - diol.

### Pregn-4- ene compounds :

C<sub>21</sub>O<sub>5</sub> group comprises the important and biologically active:

Substance E: Pregn -4-ene-3-one- 11 $\beta$ , 17 $\alpha$  ,20 $\beta$ , 21 - tetrol.

Substance<sup>\*</sup>F: Pregn -4-ene-3,11, 20-trione-17  $\alpha$ , 21 - diol;

this is also known as kendall's compound E  
or cortisone (I).

Substance<sup>M</sup>: Pregn-4-ene-3,20-dione-11 $\beta$ , 17 $\alpha$ , 21-triol;  
this is also known as kendall's compound F  
or hydrocortisone.

Substance U: Pregn-4-ene-3,11-dione -17 $\alpha$ , 20 $\beta$ , 21-triol.  
Aldosterone: Pregn-4-ene-3,18,20-trione-11 $\beta$ , 21-diol;  
(aldehydic form).

C<sub>21</sub>O<sub>4</sub> group comprises :

Corticosterone<sup>H</sup>, originally called substance H: Pregn-4-ene-  
3,20-dione-11 $\beta$ , 21-diol (II).

11-Dehydrocorticosterone<sup>H</sup>: Pregn-4-ene-3,11,20-trione-21-ol.

Substance T : Pregn-4-ene-3,11-dione-20 $\beta$ , 21 - diol.

Substance<sup>S</sup> : Pregn-4-ene-3, 20-dione- 17 $\alpha$  ,21-diol.

C<sub>21</sub>O<sub>3</sub> group comprises :

Substance<sup>Q</sup> : also known as cortexone or 11-deoxycorticosterone  
: pregn-4-ene-3,20-dione-21-ol (III).

17 $\alpha$  -Hydroxyprogesterone : Pregn-4-ene-3,20-dione-17 $\alpha$  -ol.

From the adrenal extracts were also isolated the following  
androstane compounds :

Androstane -3 $\beta$ , 11 $\beta$ , diol- 17 - one.

Androsterone : Androst-4-ene-3,11, 17 - trione.

Androst -4- ene -3, 17 - dione.