

## Endocrine disruptor and premature puberty, is there any association?

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**Background:** Endocrine disruptors (ED) can alter endocrine function. ED have become a part of everyday life and are found among phytoestrogens, active ingredients in pharmaceuticals, and additives or contaminants in food, personal care products, cosmetics, plastics and textiles



**Objective:** To describe cases of children with signs of early puberty who are exposed to ED

**Method:** Observational study of patients affected of premature puberty. Detailed medical history about exposition to ED such as parabens or tea tree oil through creams, wipes or food was made.

**Results:** 12 girls who meet the criteria were described in table 1. After removal of the product containing ED a regression of the signs of puberty was observed.

Case	Age (years)	Clinical signs	Bone age (years)	Product
1	0.6	Breast development (B3)	2	Horse meat juice
2	4.5	Pubic and perianal hair	6	Parabens (wipes) Tea tree oil
3	7	B2 and pigmented areola	7.9	Parabens (creams)
4	4	B2 and pigmented areola	4.5	Parabens (creams)
5	5	B2	5.5	Parabens (creams)
6	5	B2 and pigmented areola	6	Parabens (creams)
7	3	Pubic and perianal hair	4	Parabens (wipes)
8	1.8	B2	2.5	Parabens (wipes)
9	7	Pubic and perianal hair	9	Parabens (wipes) Tea tree oil
10	7	B2	10	Parabens (creams)
11	7	B2	9	Tea tree oil
12	6.5	B2 and pigmented areola	8.8	Tea tree oil

**Conclusion.-** It is very important to conduct a **detailed history of environmental exposure**. There is much conflicting epidemiological evidence regarding the involvement of ED in premature puberty. But more use of the **precautionary principle** could **reduce exposure early and avoid children's health continued to be harmed**.

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