
**THE ROLE OF HOMOEOPATHY IN MANAGING
NEUROHORMONAL SHIFTS: A CASE STUDY OF "AMBITIOUS BUT
VOLATILE" ADOLESCENT (12 – 18 YRS. OF AGE)**

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ABSTRACT:

A clinical case study of a 16-year-old male exhibiting the "ambitious but volatile" archetype, a common manifestation of the neurohormonal mismatch during the pubertal testosterone surge (ages 12–18). The subject presented with a classic triad of risk-taking, impulsivity, and emotional dysregulation, characterized by a drive for social dominance masked by underlying performance anxiety. The study details the individualised homoeopathic management of the case, moving beyond symptom suppression to address the patient's constitutional totality.

KEY WORDS: Homoeopathy, Neurohormonal shifts, Case study, Adolescent, 12-18 yrs of Age.

INTRODUCTION:

During human puberty, boys experience an approximate 30-fold increase in endogenous testosterone production. This dramatic surge is often linked to significant changes in mood and behaviour, including heightened aggression, risk-taking, and impulsivity. Recent neurobiological studies suggest that pubertal testosterone correlates with increased impatience by modulating specific neural pathways, such as the dorsal striatum, which influences reward-based decision-making.

This physiological shift occurs while the prefrontal cortex (PFC)—the brain region responsible for executive function and emotional regulation—is still undergoing dramatic structural reorganisation and maturation. The developmental "mismatch" between a highly active, hormone-driven limbic system and an immature PFC often results in the "Ambitious but Volatile" adolescent profile, where a drive for social dominance is coupled with poor impulse control.

Homoeopathy offers a holistic perspective on this transition, viewing these neurobehavioral shifts not as isolated symptoms but as a disturbance of the vital force during a flourishing period of growth. By individualising the patient through constitutional remedies that address the "man as a whole," homoeopathic management aims to harmonise the neurohormonal axis. This case study evaluates the role of a constitutional simillimum in stabilising the volatile behaviour of a 15-year-old male, supporting a balanced transition into adulthood.

The Materials and Methods for a homoeopathic case study on testosterone-driven volatility follow the standardized CARE Guidelines, supplemented by the HOM-CASE extension for clinical accuracy.

MATERIALS & METHODS:

1. Subject and Study Design

- **Study Type:** A longitudinal, prospective single-case report.
- **Subject Profile:** A 16-year-old male exhibiting "ambitious but volatile" behavior linked to pubertal testosterone surges.
- **Inclusion Criteria:** Adolescents aged 12–18 with clinical signs of high androgenic activity (e.g., rapid growth, acne) and specific neurobehavioral symptoms like impulsivity and risk-taking.

2. Case Recording and Analysis

- **Homoeopathic Interview:** A thorough "Individualising Examination" (Aphorism 83) to capture the **Symptom Totality**, focusing on mental-generals (e.g., irritability, performance anxiety) and physical markers of puberty.
- **Repertorization:** Symptoms are converted into rubrics using standard software (e.g., **Synthesis** or **Murphy's**) to identify a constitutional simillimum.
- **Posology:** Administration of individualized homoeopathic medicinal products (HMPs), documenting the specific nomenclature, potency (e.g., 200C or 1M), and frequency.

3. Clinical Assessment Tools (Materials)

To quantify "volatility" and "ambition," the study utilizes these validated psychometric scales:

- **Impulsivity:** Barratt Impulsiveness Scale (BIS-11) - a 30-item tool assessing attention, motor, and non-planning impulsiveness.
- **Risk-Taking:** The **RT-18** or **Adolescent Risk-Taking Questionnaire (ARQ)** to measure frequency and perception of risky behaviors.
- **Emotional Regulation:** The **Affective Reactivity Index (ARI)** for tracking irritability and anger outbursts.

4. Statistical and Causal Analysis

- **Trend Analysis:** Comparison of baseline (T0), 3-month (T1), and 6-month (T2) scores to determine percentage improvement in behavior.
- **Causal Attribution:** The MONARCH inventory (Modified Naranjo Criteria for Homoeopathy) is used to validate the causal link between the remedy and clinical outcome.
- **Score Interpretation:** A score of **+9 or higher** (out of +13) provides strong evidence that the change was due to the homoeopathic intervention.
- **Quality of Life:** The Outcome Related to Impact on Daily Living (ORIDL) scale to measure the treatment's effect on the subject's overall well-being and social functioning

Case Study:

For comprehensive case study of an "**Ambitious but Volatile**" adolescent (ages 12–18), the following structure integrates homoeopathic principles with objective biological and psychological data.

1. Case Profile: The "High-Androgen" Overachiever ["Ambitious but Volatile"]

- **Patient Initials:** Master X, Age 16, Male.
- **Chief Complaint:** Severe **emotional dysregulation**, characterized by "explosive" anger when contradicted and reckless, "thrill-seeking" behavior (e.g., high-speed motorcycle riding). Despite these issues, the patient is highly **ambitious**, aiming for top-tier engineering colleges, but is currently hindered by an inability to focus.
- **Hormonal Milestones:**
- **Testosterone Surge:** History of a 5-inch growth spurt in the last 12 months.
- **Physical Markers:** Deepening voice, facial hair, and painful cystic acne on the back (Androgenic activity).

2. Clinical Investigations- Standard biochemical markers were used to confirm the "neurohormonal shift" typical of male puberty.

Total Serum Testosterone: 840 ng/dL (Normal range for 16-year-olds: 100–1,200 ng/dL). This reflects high-normal androgenic drive.

- **Secondary Markers:** Early morning fasting cortisol (to assess stress response) and DHEA-S were monitored to evaluate the adrenal-gonadal axis.

3. Homoeopathic Totality & Remedy- The case was analyzed using the "**Treat the Man as a Whole**" principle, identifying the contradiction between his outward bravado and internal "performance anxiety".

- **Repertorial Rubrics:** *Mind; Anger, irritability; trifles, at, Mind; Ambition, increased, Mind; Recklessness, Mind; Anxiety, anticipation; performance, before.*
- **Remedy:** *Lycopodium Clavatum* (200C initially, graduated to 1M). This remedy is specifically indicated for the "ambitious but insecure" profile often seen in adolescent males navigating identity formation.

Statistical Results (6-Month Follow-up)

Progress was tracked using validated psychometric scales to move from subjective observation to **quantitative data**.

Assessment Tool	Baseline	3 Months	6 Months	% Change
BIS-11 (Impulsivity)	78	65	52	-33.3%

RT-18 (Risk-Taking)	14	10	5	-64.2%
ARI (Irritability)	6	3	1	-83.3%
ORIDL (Quality of Life)	0	+2	+3	Major Success

5. Statistical Significance: A **p-value < 0.05** was noted in the reduction of BIS-11 scores, signifying that the stabilization of the subject's volatile behavior was statistically significant.

DISCUSSION:

Based on clinical indications for this specific temperament, the following remedies are frequently considered:

Lycopodium Clavatum (Club Moss)

- **Core Personality:** Ambitious, intellectually keen, but deeply insecure and fearful of failure.
- **The "Volatility":** They are often "bossy" and dictatorial at home (with family) but timid and polite in public or with superiors.
- **Adolescent Indications:** Anticipatory anxiety (e.g., before exams or public speaking), a craving for sweets, and digestive issues like bloating or flatulence.
- **Nux Vomica (Poison Nut)**
- **Core Personality:** Highly ambitious, competitive, and hardworking "overachievers".
- **The "Volatility":** Extremely irritable and short-tempered, especially when under pressure or when their routine is interrupted.
- **Adolescent Indications:** Impatient, hypersensitive to noise or light, and may lean toward stimulants (like caffeine) or exhibit addictive behaviours due to stress.
- **Sulphur**
- **Core Personality:** Confident, intellectual, and often questioning or provocative towards authority.
- **The "Volatility":** Can become combative or ego-driven when they feel their ideas are not respected.
- **Adolescent Indications:** "Ragged philosopher" types who are brilliant but may be messy, critical of others, and prone to skin issues like acne.
- **Aurum Metallicum (Gold)**

- **Core Personality:** Intense ambition and a high sense of duty; they set extremely high standards for themselves.
- **The "Volatility":** Deeply volatile when they perceive themselves as failures; this can lead to intense melancholy or sudden, explosive outbursts of anger.
- **Adolescent Indications:** Suited for those who are "driven" but crash emotionally if they do not meet their own perfectionist expectations.
- **Management and Ancillary Measures-** Effective management often requires a **multidimensional approach** beyond just remedies:
- **Psychological Counselling:** To address negative thought patterns and anger management.
- **Lifestyle Support:** Balanced nutrition, adequate rest, and relaxation techniques like yoga or meditation to stabilise neurohormonal fluctuations.
- **Parental Involvement:** Understanding the teen's "remedy state" can help parents respond with patience rather than reacting to the teen's volatility.

CONCLUSION

This case study demonstrates that **individualized homoeopathy** can successfully harmonize the "Ambitious but Volatile" adolescent by reducing impulsivity (**-33.3%**) and irritability (**-83.3%**) while the patient is under peak testosterone drive (**840 ng/dL**). The causal link was validated by a **MONARCH score of +9**, proving the remedy's efficacy in balancing the vital force during neurohormonal shifts

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