Metabolic investigations were normal and cytogenetic study revealed normal male karyotype. Targeted array-based comparative genomic hybridization revealed a microdeletion of 540kbp from chromosome 7q33 (136,018,399-136,558,387) × 2 region. This deletion was merely encroaching the gene CHRM 2 which has a role in central nervous system functioning, although its exact role in autism has not been elucidated so far. Parental analysis revealed a loss of 42 kbp from the same 7q33 (136,258,387-136,300,365) × 2 region in father's side. Maternal chromosomal analysis was normal.

The distal region of chromosome 7q is home to many important genes, the deletion/ duplication of which has been reported with varying phenotypes. Matsson, *et al*. [1] reported association of *DGKI* (diacylglycerol kinase iota) gene at chromosome 7q33 with developmental dyslexia in Finnish and German cohorts. *Contactin Associated Protein-like 2* (*CNTNAP2*), a member of the Neurexin family gene located at 7q34 has been linked strongly with autism [2,3]. There are several other suspicious loci on different chromosomes which are supposed to be linked with autism. Speech and language region which has been most sought to be associated with autism lies at 7q31-33 with *FOXP2* and *WNT2* genes in region 7q31 being more specific to speech delay and autism, respectively [4,5].

Genetic anticipation is a phenomenon in which symptoms of a disease manifests earlier after passing on to next generations. Small deletion at 7q33 region in father with larger deletion at the same region in son alongwith early presentation of typical ASD features explains the possibility of anticipation in the inheritance of genes related with ASD at 7q33 region. Further clinical validation is important as it may have practical significance on genetic counselling and timing of surveillance initiation. Further research is needed to explore the underlying mechanism of anticipation related with chromosome 7q33 and autism.

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Prescription of Generic Drugs – Is it Really a Smart Initiative?

A generic drug is a drug which has the same constituents, dosage form, strength and quality as the reference/ branded drug and is marketed under a non-propriety name after expiry of the original drug patent [1]. The Government of India recently announced its mandate to stop issuing license for the manufacture or sale of branded drugs in an effort to promote prescription of only generic drugs for patient care, applicable at all government hospitals [2]. It launched the '*Jan Aushadhi'* campaign for distribution of these generic drugs [3]. The above policy was introduced to curb the presumed malpractice associated with use of branded drugs, wherein the doctors' prescription may be biased by pharmaceutical companies. Thus, it was anticipated that by prescribing only generic drugs, the malpractice of dispensing costlier medications would be reduced.

However, the following facts need mention to comprehend the present situation. First, the production and availability for most of the generic drugs is limited to few *Jan Aushadhi* stores, which have insufficient stock of medicines or are non-functional [4]. The only source of medication-provider for the patient is thus the local pharmacy. This leaves the patient to the mercy of the dispenser, who can dispense any brand available for the generic drug prescribed and supposedly make the 'most suitable' drug choice for him. Second, many patients

FIG. 1: *High MRP quoted on packaging of the concerned product.*

attending the government sector are illiterate and less versed with medical terms or drugs. This puts them at a higher risk of being cheated by drug dispensers, whose business strategy concentrates chiefly on maximizing monetary profits. At times, some pharmacists are unqualified and insensitive to patient's condition, unlike most physicians who might think twice before advising a costlier medicine to a poor patient. Majority of the drug market is unregulated, which is apparent by the wide price range of the same drug manufactured by different companies. Currently, there is no strict quality-control to monitor the constituents or price of every brand available in the market.

A glaring example of misuse of generic drug policy is highlighted. A resident doctor, following the government's policy, prescribed oral amoxicillin-clavulanic acid (as a generic drug) to a child as a switch-over therapy after recovering from severe pneumonia. Almost 602 brands of amoxicillin-clavulanic acid are available; most reputed brands in syrup form cost approximately Rs.50-60 per 30 mL bottle for 200 mg/5 mL formulation (Rs. 40-50 per gram amoxicillin) [5]. However, this patient was dispensed a local brand which was costlier by about 3 times the well known brands (Rs. 101 for 30 mL bottle for 125 mg/5 mL formulation amounting to Rs. 134 per gram of amoxicillin). This brand – and its price – seems to be designed just to cheat the ignorant customers, as apparent from the manufacturer's attempt to simulate the label graphics of another well-known brand (***Fig. 1***). The mother, having a poor financial status, was obviously worried about the higher cost of this drug in comparison to the estimate given to her by the resident doctor, and returned back to us to check.

The above cited example is just one of the many instances of drug mal-dispensing that go unnoticed. Therefore, it is essential to develop a fully functioning generic drug production and distribution market before we change to an 'only generic drug' policy. Simultaneously, there should be strict monitoring of quality and price of drugs to prevent manufacture of sub-standard and irrationally priced products. The rationale of prescribing a generic drug can only be justified thereafter in patients' best interests.

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