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An Ideology of Replacing Arsenic Trioxide by Poultry Feather Meal for the Treatment of Acute Promyelocytic Leukaemia

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Abstract : The ideology of arsenic exposure from poultry feather meal can be used for the treatment of Acute Promyelocytic Leukaemia (APL) is disclosed. In broilers organo-arsenal drugs are widely used for enhancing the growth of chickens. Feathers from these chickens are processed into animal meal products and it is used as an animal feed additive and also as organic fertilizer. Various drugs are injected onto the broilers and one such drug is called as roxarsone(4-Hydroxy-3-nitrophenyl) which is the major reason for accumulation of inorganic arsenic in the feathers of chickens. Arsenic trioxide is a chemotherapy drug which is already in use for treatment for Acute Promyelocytic Leukaemia (APL). Therefore, the feather meal can be directly taken by APL patients which would result in speeding up the death of leukaemic cells and encourages normal blood cells to develop properly.

Keywords : Acute Promyelocytic Leukaemia(APL), roxarsone, feather meal, organo-arsenal drug.

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