IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 1, January 2023

Review on Formulation and Evaluation of Aceclofenac Tablet

Nida N. Mulla, Sanjay K. Bais, Ranjeet C. Jadhav

Fabtech College of Pharmacy, Sangola, Solapur, Maharashtra, India

Abstract: In 1843, the British painter and the inventor was William Brockedon is granted a patent for a machine capable of such "Shaping Pills, Lozenges and Black Lead by the Pressure in that Dies". The device was capable to be compressing powder into the tablet without use of an adhesive Aceclofenac it is an oral non-steroidal anti-inflammatory drug (NSAID) which having anti-inflammatory and analgesic properties. Although there are various differences in the authorized indications between countries, aceclofenac is mainly to recommended for the treatment of inflammatory and painful processes, such as the low back pain (LBP), scapulohumeral per arthritis, extraarticular rheumatism, odontalgia, and the osteo arthritis (O A), rheumatoid arthritis (RA), and the enclosing spondylitis (AS). The purpose that of study was to develop fast and rapid dissolving tablets of the Aceclofenac using different concentration superdisintigrents. Fast dissolving tablets of the Aceclofenac were prepared by wet granulation technique using the sodium starch glycol ate together with Polyplasdone xl-10 as super disintegrants. The porous granules where that compressed in to tablets. These tablets are were evaluated for drug content, weight variation, friability, hardness and wetting time and Dispersion time. All the formulations are showed at low weight variation with the dispersion time less than 90 seconds and the fast in vitro dissolution. These types of drug content of all the formulations was within the acceptable limits. The optimized formulation is showed good release of profile with maximum drug being released at prolong time intervals. That was concluded that fast dissolving tablets with improved the Aceclofenac dissolution could be prepared by wet granulation of tablet. The dispersion time and the dissolution parameter (t50% and t80%) decreased with increasing the concentration of Polyplasdone x1-10vertisement.

Keywords: Aceclofenac

REFERENCES

- [1]. Vinayak V Ranade, Mannfred A Hollinger. Drug Delivery Systems. 2nded.BocaRaton: CRCpress; 2004.p.2.
- [2]. ChienYieW(ed.).Noveldrugdeliverysystems.2nded.NewYork:MarcelDekker,Inc;1992: p.139.
- [3]. Jayesh Parmar, Manish Rane. Tablet formulation design and manufacture: oral Immediatereleaseapplication.PharmaTimes2009;41(4).
- [4]. GilbertSBanker,ChristopherT Rhodes (ed.). Modern Pharmaceutics. 4thed.NewYork:MarcelDekker,Inc.;2002.
- [5]. EugeneFFiese,TimothyAHagen.Preformulation.In:LeonLachman,HerbertALieberman, Joseph L Kanig. (eds.) The theory and practice of industrial pharmacy. 3rded.Mumbai:VarghesePublishingHouse;1987.p.171,293-294,374.
- [6]. JainNK.PharmaceuticalProductdevelopment.NewDelhi:CBSPublisheranddistributors; 2006.p.426.
- [7]. Capscanada[Online].Availablefrom:http://www.capscanada.com/assets/technical%20specifications%20gelatin%20cc%20w%20lq[Accessed10thOctober2011]
- [8]. Vyas SP, Roop K Khar. Controlled Drug Delivery concept and advances. New Delhi:Vallabh Prakashan;2002.p. 1-9.
- [9]. Robinson JR. Sustained Release Drug Delivery Systems. In: Remington. The Science and Practice of Pharmacy. 19th ed. San Francisco: Mack Publishing Company; 1995. p.1081-1082.
- [10]. Jayanthi B, Manna PK, Madhusudhan S, Mohanta GP, Manavalan R. Per oral extendedrelease products -An overview. Journal of Applied Pharmaceutical Science 2011;1(2):50-55.
- [11]. NanditaGDas,SudipKDas.Controlledreleaseoforaldosageforms.Formulationfilland finish. [Online] 2003.

Copyright to IJARSCT DOI: 10.48175/568 589

IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 1, January 2023

- Available from: www.pharmtech.com/pharmatech/data/articlestandard/pharmtech/232003/59302/article.pdf Accessed18thOctober2011]
- [12]. Ying-huan Li, Jia-bi Zhu. Modulation of combined release behaviours from a novel tabletsincapsulesystem. Journal of Controlled Release 2004;95:381–389.
- [13]. Lakshmi Prasad A. Drug-Excipient Interactions. [Presentation] Vadodara. 7th February 2008.
- [14]. The American Association of Medical Chronobiology and Chronotherapeutics. Chronobiology and Chronotherapy of Arthritic Diseases [Online]. 2001

 Available from: http://www.aamcc.net/cap2.htm [Accessed 20th October 2011]
- [15]. Ranjani V Nellore, Gurvinder Singh Rekhi, Ajaz S Hussain, Lloyd G Tillmand, Larry LAugsburger. Development of Metoprololtar trateextended-release matrix tablet formulations for regulatory policy consideration. Journal of Controlled Release 1998; 50:247–256.
- [16]. Sean C Sweetman. Martindale-The Complete Drug Reference. 36thed.London:Pharmaceutical Press.2009;2:2407
- [17]. Joint Formulary Committee. British national formulary. BNF 57. London: BMJ publishinggroup&RPS publishers;2009.p.554
- [18]. Aceclofenac[Online]. Available from: http://www.mims.com/India/drug/search/aceclofenac[Accessed 20th November 2011].
- [19]. TripathiKD.EssentialsofMedicalpharmacology.5thed.NewDelhi:JaypeeBrothers;2003.p.594.
- [20]. MinistryofHealthandFamilyWelfare.IndianPharmacopoeia.NewDelhi:Thecontroller ofpublications,2010;Vol.I-III.p.192-193,751-754,770,1699.
- [21]. Dooley M, Spencer CM, Dunn CJ. Aceclofenac: a reappraisal of its use in the management of pain and rheumatic disease. Drugs. 2001;61(9):1351–1378. doi: 10.2165/00003495-200161090-00012 [PubMed] [CrossRef] [Google Scholar]
- [22]. Brogden RN, Wiseman LR. Aceclofenac. A review of its pharmacodynamic properties and therapeutic potential in the treatment of rheumatic disorders and in pain management. Drugs. 1996;52(1):113–124. doi: 10.2165/00003495-199652010-00008 [PubMed] [CrossRef] [Google Scholar]
- [23]. Almirall Ltd. PRESERVEX® (aceclofenac) 100 mg film-coated tablets: UK summary of prescribing characteristics; 2018. Available from: https://www.medicines.org.uk/emc/product/6578/smpc. Accessed November 6, 2021.
- [24]. lmirall SA. Airtal (aceclofenac) 100 mg film-coated tablets: summary of product characteristics; 2014. Available from: https://cima.aemps.es/cima/dochtml/ft/59024/FT 59024.html. Accessed November 6, 2021

DOI: 10.48175/568